THE NORTH-WESTERN
MEDICAL AND SURGICAL JOURNAL.

VOL. IV.] NOVEMBER, 1851. [No. 4.

Part 1.—Original Communications.

ARTICLE I.

Observations on Cerebro-Arachnitis, or Meningitis, as it occurred in Clark and also Menard Counties, Ill. Read before the Central Medical Society of Illinois by JAMES SMICK, M. D.

No person that has ever had cases of Meningitis, in a malignant form to treat, will lightly esteem any information relative to the Ætiology, pathology and treatment of it, from any source however humble.

Having seen many cases of this fatal disease, in the course of 17 years' practice in Darwin, Clark County, and some since I came to Menard, I propose giving to the society the results of my experience relative to it; and if it does nothing more than call forth the observations of abler writers, on the subject, I shall be well paid for my trouble.

The first cases that I saw, were in 1832, and I have seen more or less of it every year since. In 1841, and also in 1845-6, Meningitis raged as an epidemic, in Darwin and vicinity in Clark County, Ill. It was much more fatal in these years, than when only a few sporadical cases occurred, owing to the increased malignancy attending it.

The epidemic did not rage to the same extent in 1841 and 1845 that it did in 1846. In the winter of 1845 and '46 the malignant Erysipilas or "Black Tongue," as it is termed,

made its appearance. It commenced some time in December, and raged until warm weather set in, in the spring.—About the middle of March, the first cases of Cerebro-Arachnitis made their appearance, and continued to occur until the middle of June following. The period of its greatest prevalence was in April, this year. The disease was less tractable to medicines in this month, than any other. In 1841 we also had more cases in the month of April. In 1845 the first cases occurred the last of September, and the last about the middle of November following; no more then until it commenced in March. I had cases in almost every month of the year, but none from September until May; fewer in June, July and August, than any other months of the year.

The few cases that came under my observation since I came to Menard, occurred between the months of October and May. Two cases in 1848, seven in 1849, and one in 1850. No disease that has fallen to my lot to treat, has been so fatal as this one. Asiatic Cholera cannot boast of a greater mortality. It is not unusual for one half or more of the cases, to terminate fatally. By reference to the Medico Chircergical Review, No. 86 for 1841, we see that the disease prevailed at Versailles, Rockport, Metz and Strasbourg. The history of the epidemic as it appeared at Strasbourg, is given by Dr. Wunchendorff. The mortality is even greater at these places than we have stated above. "One half," says the Dr. "of my patients died; but this mortality is common with this epidemic, with sporadic Meningitis, which usually seems fatal in two out of every three cases. In the Civil Hospital at Strasbourg, 21 patients died out of 40 that were admitted; and in the Military Hospital the mortality was still greater—104 out of 176." A small fraction over a third of the cases in my practice proved fatal. Of the 10 cases that I had since I came to Menard, four proved fatal—two were in "articulo mortis" when I saw them.

Ætiology. It may be presumption in me to attempt to trace out the cause of epidemic Meningitis, as all who have written upon the subject, so far as I know, have given so few theories, or hypothesis to build upon. But I wish to state facts, so far as I have observed them, and draw from them, such deductions as they may justify, in order that the true cause may be discovered.

The fall and winter preceding the epidemic, that we had in the spring of 1841, were unusually wet. The Wabash river was very high, overflowing its banks many weeks together, as well as the small streams that empty into it near Darwin; leaving large heaps of earth and silt washed together, by the water, when it subsided in the spring. The same was the case before the epidemic of 1845. All remember the high water of 1844, which did not subside, very low until 1845. The fall of this year was dry; but in December it commenced raining, and raised the streams to high water mark. When the water subsided in the spring, more than a usual amount of silt was left on the bottoms. So far as any mention is made of the weather, by writers on this subject, say the disease was preceded by a great deal of wet weather.

This was the case with the epidemic that prevailed in Rutherford County, Tennessee, in 1842, as given by John W. Richardson, M. D., in his report to the Medical Society of the State, for that year, (vide Western Journal of Medicine and Surgery, Vol. vi. No. iv.) Also the case with the epidemic Cerebro-Arachnitis, that raged in Boone and Galoway Counties, Missouri, after the great freshets of 1844 and '45. A large amount of silt and earth was washed up and left on the bottoms after the water subsided. To this cause some of the physicians of those Counties attributed the epidemic.—Do they not stand one to another as cause and effect? If so, what is the agent or agents?

The first question here propounded, may very safely be

answered in the affirmative. The second rests entirely upon conjecture; owing to the imperfection of our science we have failed to detect any agent, to which we may attribute it.

As to the first question, I think the facts above enumerated prove that Meningitis follows freshets succeeded by warm winters. Whether "these things of themselves are sufficient to produce the epidemic influence of the atmosphere, I am not able to say; but one following in the train of the other, I think they at least demand a close investigation. I will mention a few facts, that came immediately under my own observation, that will perhaps, throw some light on the subject.

About three fourths of a mile below Darwin on the Indiana side of the river, there was a farm with some 15 or 20 acres of ground cleared, that had been cultivated some two or three years; a small cabin stood upon it. In 1844 the family that lived on this place had to leave in consequence of high water that occurred in the month of June (it always overflowed in a high stage of water,). The water kept up for some time, so that no one attempted to occupy it till the spring of 1846, in the last of March and first of April. The man who expected to occupy it engaged some friends to repair the cabin and assist in putting up the fence, which was thrown down by the high water. The company consisted in all of about fifteen men, women and boys. They made what is usually termed here "a frolic" to repair the farm. The women went along to cook for the others. Whisky was freely used on the occasion. It took them two days to accomplish the work. Ten out of the fifteen took Cerebro-Arachnitis; seven of whom died. The period of incubation was from three to ten days. The first case occurred the third day after they quit work, and the last the tenth. Two of the first cases were fatal; the first one only lived about six or eight hours from the first feelings of indisposition. The last cases were not so severe as the first; most of whom recovered.

I think drinking on the occasion was not the cause of the disease, for the following reasons:

1. The intemperance on this occasion was no greater than a portion of them were in the habit of indulging in every day.

2. Those who did not use spirits were also affected.

3. The "frolics" which were made on the prairie, were not followed by the same results.

That the cause of the disease existed on the premises, I think there can be no doubt, from the fact that so many were taken sick out of those that engaged in the work; and that they lived some five or six miles apart, belonged to four families, and were taken sick so nearly together; while the members of the families who did not work on this place escaped the disease.

The amount of silt left on the field by the water and drifts of wood out of which the rails were taken, was well calculated to send forth what is usually termed "*malaria*," if it had been at a season of the year when the temperature was sufficiently high to produce it. May not malaria produced by a high temperature be the cause of Bilious fever, and malaria produced by a low temperature the cause of Cerebro-Arachnitis? The foregoing facts go to prove this.

In what this malaria consists, I am not able to say. Whether it consists of heat and moisture, or some gaseous emanations from the earth, such as carbonic acid, carbonic oxide, carburetted hydrogen, sulphuretted hydrogen, carbonate of ammonia, or cryptogamia, such as is termed the vegito-animalcular hypothesis, I cannot say. But be it what it may, it seems to be generated in the fall season of the year, that keeps the disease up through the winter, and when a sufficient expansion of caloric takes place in the spring to generate it, the disease increases. Or, as we have many cases on record of malaria laying in the system for a considerable length of time in a latent state, before it produced disease, might the ma-

laria generated in the summer lay in the system in a latent form until cold weather brought on some exciting cause of disease that would so modify it that the attack would be Cerebro-Arachnitis, in place of Bilious Remittent Fever? I rather think not.

Pathology.—Relying on its effects to guide us in an estimate of its character, we may say that efficient cause of Cerebro-Arachnitis is a sedative and irritating quality, somewhat like the narcotic-irritating gases; or certain solid and fluid bodies, which, in large doses, destroy life suddenly, by reducing power, and in smaller portions weaken while they pervert the functions, producing reduction of vital energy, obtuseness of sensibility, suspended or perverted secretion and diminished calorification, and from an equal necessity they will be felt in all parts of the body, because the agent which produces them travels with the circulation.

If we suppose such matter to be simultaneously introduced into all the serous sacks of the body, we should expect immediate reduction of the vital powers and early death; though we can conceive of the quantity being so small that the system would react, and fever and inflammation ensue. And it requires no great stretch of the imagination to suppose that the inflammation was determined to the Arachnoid membrane of the brain and spinal marrow, in this case, by the same law that governs the virus in other cases, producing diseases and inflammations of their own peculiar character. Such as the virus of Small Pox, a peculiar eruption and inflammation of the surface; the virus of Scarlatina determines its action upon the skin and throat; and Erysipelas upon the skin.

May not the cause, by the same law, determine the inflammation to the Arachnoid membrane, in Cerebro-Arachnitis, in those cases where they survive the first shock?

In those cases that die suddenly—in which no reaction follows the chill—the powers are so reduced that they die as individ-

uals die under the influence of prussic acid, or some other poison of a like kind. Their susceptibilities to the various sustainers of life are annihilated, and they sink. Although the surface is cold they do not shiver nor complain of cold, because the functions of their nervous systems are too deeply smitten to admit of their action on the muscles, or of their taking cognizance of the loss of caloric. And the more complete this symptom, the less hope we can have of reaction taking place. But if death does not follow the first impress of the poison, according to a physiological law that exists, that, after *depression* there will be *elevation*, the vital forces arise from their state of depression, and excitement is the result.

In this stage of the disease the inflammation seats on the Arachnoid membrane, and also, in some cases, the substance of the brain itself constituting what is called by Rollet Cerebro-Spinal Meningitis, and Encephaloid Meningitis, according as the envelops alone of the cerebral centres, or the cerebral substance itself participates in the inflammation.

Post mortem examinations exhibit active congestion, suppuration, and even softening of the brain and spinal marrow, according to the degree and intensity of the disease.

Dr. F. M. PAYNE, and myself, made a post mortem examination of a boy that died from this disease, in December, 1842. He died the 6th day from the attack. The last 24 hours before he died he had some four or five hard convulsions. The examination was made some twelve hours after death. On opening the cranium the external blood vessels were highly congested; the Arachnoid membrane was inflamed in every part of it, and covered with a thick layer of pus. This extended as far down the spine as we were able to see. The corticle substance of the brain seemed to be slightly softened, the medullary portion was normal, there was rather more water in the ventricles than in the healthy state. We examined no other parts of the system, as the symptoms did not indicate

any particular derangement of any other part; and the amount of disease that we discovered in the cranium we thought was sufficient to account for the death of the patient.

I have seen in a good many cases an Erysipelatious eruption, follow the inflammation of the Arachnoid membrane. This eruption commences about the time the inflammation leaves the brain. Its general location seems to be the throat under the chin, and the face. Case 3d is an example of this kind.

Can the inflammation of the Arachnoid membrane be exclusively of the erysipelatious character? If so, this affords another reason why it seats upon the surface of the brain and Arachnoid membrane. Death is evidently produced in those cases that die in a few hours from the attack, by congestion of the brain and enervation, or rather paralysis of the nervous centres; and those that reaction takes place in, die from the result of inflammation of the Arachnoid membrane and brain.

Symptoms.—This disease has its exacerbations and remissions, very much like Bilious Remittent Fever, or most of the diseases of a miasmatic origin.

The type is mostly quotidian, and in some cases it is tertian. Each exacerbation, in some cases, is preceded by a chill, or chilliness; and the more distinct the chill, the exacerbation and remission, the mere manageable the disease.

The fever, in some cases, is of a Synochus, and in others, of the Typhoid character.

The disease is usually ushered in with a chill, which lasts for three or four hours, and in some cases the coldness does not amount to a chill, only a chilliness. This is soon followed by a reaction that runs high in many cases; in others the reaction is feeble and broken. These are the bad cases, if attended with other symptoms denoting malignancy. About the first appearance of reaction, the patient complains of a severe pain in his head and back of the neck; in some cases the

pain commences suddenly as though he was struck with a hammer, and continues of a throbbing kind, which is very annoying to the patient. Some cases are attended with a severe pain in the back and loins. Sickness and vomiting frequently attend. When the reaction runs high, and in those cases attended with malignancy, they become restless, talkative, boisterous, calling those to whom they were most attached in health, pulling and scratching the bed clothes, sometimes biting their finger nails, and occasionally screaming as though they were frightened. Others lay perfectly stupid, muttering incoherently, and when aroused would answer questions rationally if addressed in a sharp, quick tone, and then would immediately commence writhing and twisting, and talking incoherently again. Those who die before any reaction is established, roll from one side to the other, and toss about in every possible manner, apparently insensible to all surrounding objects; and if aroused at all, are not sensible of their danger or even that anything is the matter with them. And those who die by congestion of the brain, the breathing becomes stertorous before death. In most cases a free perspiration sets in, soon after reaction is established, which continues through the exacerbation. Deafness attends in most cases. Obscure vision, double vision, and even blindness, attends in many cases. The head is drawn back between the shoulders, and the whole spinal muscles contracted so as to form the body in a curve backward, in nearly all the bad cases, which incapacitates the patient from laying comfortably upon the back, such as exists in that form of tetanus called Opisthotonos. The pulse in the cases attended with the sinking of the vital energies of the system, is feeble and not very quick; during the exacerbation it is quick and frequent, beating mostly over 100 and sometimes 150 beats in a minute; and in some cases it is hard. The tongue at the commencement is not much affected, but after a few paroxysms it becomes white,

sometimes yellow, and in the cases where the fever assumes a Typhoid character, it is covered with a thick brown or black coat, which becomes very dry; the tongue, in this case, cracks. The bowels, in the most of cases, are torpid; all the secretions seem to be arrested or retained. The urine is not discharged for some hours, and is mostly of a high color.

Sometimes the arms, and at others one or both legs, are paralyzed. An eruption frequently makes its appearance on the surface, which is confined to the forehead, breast and arms; it is in the form of red specs. In some cases the throat is sore, and in a few I have seen paralysis of the muscles engaged in deglution exist, so that it was almost impossible to swallow. It is not unfrequent—if the cases are protracted—for severe spasms or convulsions to attend; this is a very unfavorable symptom.

Delirium is a prominent symptom of this disease, but in some cases the mind is not affected, the patient retains his senses through its whole course.

Prognosis.—Cerebro-Arachnitis has no certain number of days in which to run its course; and is not marked by any critical days. The first cases that occur in a place, when it assumes an epidemical form, are much more malignant than after it has existed in this character for a while. Sporadic cases yield more readily to medicines than when it rages as an epidemic. This is the case so far as I have observed. The more protracted the chill, the more broken the reaction, and the greater the nervous prostration, the greater the danger; especially if the sensorium is deeply affected at the same time,—that is, if the surface is cold and the patient is not sensible of this absence of caloric, delirium, restlessness, &c., while the more open the excitement, the longer the remission and the more sensible the patient is of all his aches and pains, the more favorable the result.

A great many cases die in the first chill; and if they sur-

vive this, and the reaction is broken, they sometimes die in the second exacerbation. Convulsions, if they occur in the disease after it has existed some days, form an unfavorable smyptom, for most of the cases in which I observed it proved fatal. In most of those cases where the nervous system was deeply affected, and convalescence from the first attack was established, the recovery was very slow. In some, swelling of the joints, and phlegmonous inflammation of the muscular tissue—mostly upon the arms and legs—followed as a sequel.

Diagnosis.—Cerebro-Arachnitis may be distinguished from Cynanche Tonsillaris, or Cynanche Maligna, by the absence of inflammation of the tonsils in many cases, and when it does occur the swelling is not so great; and when the eruption does occur it is in more circumscribed spots, not so large as in either form of Cynanche.

It may be distinguished from Congestive Chill by the disease running a much more rapid course. The patient generally survives the first and second chill in Congestive Chill, but in Cerebro-Arachnitis when he dies in the chill it is usually the first; and the sensorium is more affected in this than in Congestive Chill.

It may be distinguished from Typhoid Fever from the rapid course the disease runs, and the prominence of the leading symptoms. And from Bilious Remittent Fever by the absence of the bilious diathesis, and the greater amount of pain in the head, and opisthotonos, when that exists. And also from Pneumonia, from the absence of the pneumonic symptoms, as pain in the region of the lungs, cough, &c.

Treatment.—The first indication to be fulfilled is to bring about reaction, and prevent the rapid sinking of the vital energies of the system.

The second indication is to lessen the inflammation of the brain, and moderate the excitement.

The third indication is to intercept the paroxysms, so as to arrest the disease in its course.

The remedies that have succeeded best in my hands to accomplish the first indication, are, first, sinipisms, as strong as they can be made, to the entire spinal column and abdomen, and also envelope the lower extremities with the same. These should remain on as long as the patient can bear them, if he is sensible of their effects,—if not, until they have made a strong impression. When these are removed the surface should be rubbed with a strong effusion of cayenne pepper and vinegar. The rubbing should be performed under the bed clothes, so that the air does not come in contact with the moist surface; and it should be performed diligently and perseveringly, until reaction takes place, or all hopes of its taking place are given up. Artificial heat should be applied to assist these in bringing about reaction. This may be done by applying warm stones, warm bricks, or ears of corn boiled in water, around the patient, especially to the lower extremities, until reaction takes place.

Internally I give a powder composed of the bi-chloride of mercury and pulv. camphor, of each 10 grains, and pulv. opium ¾ of a grain, every two or three hours, until reaction takes place; and after it takes place I reduce the quantity of camphor to two grains, and repeat until a decided impression is made on the bowels, or seven or eight powders are given. I also use sulph. ether and spirits ammonia, to bring about reaction, and a remedy that I think well of, but have not had much experience with in this disease, is liquid camphor, or three parts of camphor dissolved in one of chloroform; ten or twelve drops of this should be given at short intervals until reaction takes place.

The remedies that I use to fulfil the second indication are, externally, cold applications to the head, cold water or ice applied to the head—if the cold water is used, it should be done by pouring on, or applied with a sponge often enough to keep the head cool. A large blistering plaster long enough to

cover the cervical vertebræ, should be applied to the back of the neck. The spinal column below the blister should be rubbed frequently with a liniment made of equal parts of hartshorn, camphor, and spirits turpentine. Rollet is in the habit of applying the actual cautery to the spinal column, with marked advantage. I have never used it, but will in the first case that requires it.

When the fever runs high and the heat of the surface is great, and also dry, it should be sponged off frequently with warm vinegar and water, or weak soap suds; this should be done often enough to keep the heat down.

Internally, I continue the calomel, camphor and opium powders used to bring on reaction, or if I have not been called until this stage of the disease, I commence them immediately and give them until free catharsis is produced, or seven or eight powders given; if they do not operate, follow them with a dose of castor oil or seidlitz powders. I give some four or five powders of the above kind, followed with a cathartic if necessary, every exacerbation, or once every twenty-four hours if the exacerbations are not well marked, until all marks of inflammation subside, or the mouth is affected by the calomel. When the pulse is hard and no symptoms exist that indicate a sinking of the vital energies of the system, I bleed from the arm until a decided impression is made upon the circulation, and repeat if necessary. There is no remedy that requires more caution, or discretion in using it, than bleeding in Cerebro-Arachnitis; for there is a strong tendency throughout the course of the disease to the sinking of the vital energies of the system, and when venesection increases this tendency, we should not use it; but where the excitement is open and the inflammation runs high, we may venture upon it without any hesitancy.

Rollet, and other French physicians, rely with much confidence on depletion and antiphlogistics in the treatment of this

disease. But the same success has not attended my use of the same remedies. I therefore discriminate in the cases in which I now use them, especially depletion. In all cases marked by a remission, during the remission I use quinine, morphine, and precip. carb. ferri., to intercept the paroxysms, which is the third indication of cure.

This is the great antiperiodic remedy of the age, and all diseases of miasmatic origin marked by exacerbations and remissions, demand its use. In the first remission that presents itself I use a powder composed of from six to eight grains of quinine, ¼ grain morphine, four grains precip. carb. ferri., one every two hours during the remission, or until the system is brought under the influence of the quinine. I use this compound in this way during each remission, until the disease is broken up. If there is much stupor or somnolency I omit the morphine.

The only class of cases that I have not seen the tonics benefit is that class attended with a dry or parched tongue. Quinine has been as beneficial in this disease, in my hands—in the cases where it can be given—as it is in Bilious Remittent fever.

It may be said that the cases in which it is beneficial would recover without it. This, according to my experience, is not correct; for many recover under its influence presenting the same group of symptoms that, before I used it at all, proved fatal. And, further, the same success did not attend the practice of the physicians that did not use it, in the same epidemic, as it did those who did.

The remedies here detailed in the three grand indications of cure, are those that I rely upon, and that have proved most successful in my hands, in controling this formidable disease, Cerebro-Arachnitis. But in a disease presenting such a variety of symptoms, many symptoms may arise during its course that the remedies above given will not reach; there-

fore each symptom should be met by its appropriate remedy. I will give in detail three cases from the many that I have treated, as a further illustration of the disease:

Case 1st. I was called to see Mrs. M——, April 9th, 1846. She was taken about three hours before with what they supposed to be an ague chill. She was 18 years of age, of a sanguino-bilious temperament; the mother of one child; had always enjoyed good health. I found her tossing from one side of the bed to the other, pulling the bed clothes, talking incoherently, repeating mostly monosylables. These restless spells would last for 20 or 25 minutes; they would be succeeded by stupor or somnolency that would last about as long. The extremities were cold; the pulse was small but not very frequent, rather shattered; respirations rather more frequent than in health, the inspirations were long and heavy; appears insensible to all surrounding objects, but when spoken to in a loud sharp tone, she will seem to pay attention at the time, but would not answer questions. Said when she was first taken the pain was in her head. I ordered mustard poultices to the back and bowels, and the extremities rubbed with Cayenne pepper and vinegar, cold applications to the head; gave a powder composed of 10 grs. Sub. Murias Hyd. ½ gr. Pulv. Opii, 10 grs. Pulv. Camphor and repeat every 2 hours; also, a half teaspoonful of of Sulph. Ether to be given every half hour. I visited her in company with Dr. Seth N. Montague, (who was practicing in partnership with me at the time,) in an hour and a half from the time I left her. No change for the better. The rubbing and artificial heat that had been applied increased the heat of the surface, but it was not of that character that indicated reaction. We continued the treatment. Dr. Montague remained with her and did all that could be done, but in an hour and a half more she was a corpse.

Case 2d. We were sent for to visit Mr. A. M——, April

11th, 1846. Dr. Montague visited him, found him in a chill. The sinapisms, rubbing and Ether detailed in the above case, soon brought on a re-action. The pain in the head was very great, it would make him scream out aloud. Said "it was like some one was beating the top of his head off;" was restless; fever ran high. Soon after re-action came on, he commenced sweating, which continued through the exacerbation. He directed Sub. Murias Hyd. 10 grs., Pulv. Camphor, 2 grs., Pulv. Opii, ½ gr. to be given every 3 hours until the bowels were moved freely or 7 powders were given, and in case of no operation to be followed with a dose of Castor Oil. He also applied a blistering plaster to the back of the neck, and had cold applications applied to the head as often as the heat required them.

April 12th.—We visited the case together this morning, found him without much excitement, pain in the head severe; delirious; slight degree of opisthotonos, the contractions of the muscles of the back were not very rigid; pulse over 100; tongue covered with a white coat; eyes red and watery. The powders had operated without the oil; the blister had drawn well. We directed the powders to be commenced at 9 o'clock, and one to be given every 3 hours until he takes five, to be followed by Castor Oil if necessary. Liniment to be applied to the back, and when the fever rises, cold applications to the head; and the surface to be bathed frequently with warm vinegar and water.

Dr. Montague visited him at 4 o'clock P. M. He found him laboring under a high degree of excitement, his pulse was stronger then in the morning and somewhat hard; other symptoms as in the morning. He took 16 ounces of blood from the arm. He directed a powder to be given, when the excitement went down, of Quinine 8 grs., Precip. Carb. Ferri., 4 grs., Pulv. Dover 2 grs., every 3 hours during the remission.

13th—I visited Mr. M—— this morning at 8 o'clock, found him more rational; complains very much of the pain in his head back and hip of the right side; left eye some better, the right one worse, the cornea is completely opaque, and the pain in it is deep seated. His medicine had operated freely on the bowels—had to take the Castor Oil; had taken three of the Quinine powders. The muscles of the back are not contracted so much; when he is dozing he is talking incoherently, but stops when he is roused up. Continue the same treatment, that is, the Quinine powders every 2 hours until the fever increases, and Calomel, Camphor and Opium in the evening, 5 powders 3 hours apart, Oil after, if necessary; the Liniment to the back. And in addition, a blister over the affected hip, and a solution of Nitrate of Silver to the eye.

April 14th.—Visited him again, found an improvement in all the symptoms excepting the right eye and hip. The blister had drawn well; but there seemed to be a total paralysis of the limb. Continue the same treatment.

15th.—He appears still better, excitement last evening was less than before; rested some through the night; talked less; when he is raised up he has no disposition or ability to hold up his head; very little pain in the head. The eye and hip are no better. Continue the same treatment.

16th.—Still continues to improve, has some appetite, took some broth; thinks himself that he is better; his mouth is slightly affected by the Mercury; discontinue it; continue the tonic powders every 4 hours; directed the paralysed limb to be rubbed with Liniment, and increase of the irritation over the lumber vertrebra.

From this time there was a gradual improvement in Mr. M's. case, with the exception of the eye and hip. The eye never recovered. It appeared that the optic nerve was destroyed by the inflamation, as well as the opacity of the cornea that existed.

The leg improved so that he could get about with a crutch. He could move it, but had not strength enough in it to bear his whole weight upon it.

The nervous system received a shock that it never recovered from. His system was left a complete wreck. He died five months after of an attack of Billious Remittent fever contracted by exposure to night air.

The two cases detailed above are among those that contracted the disease repairing the farm and consequently occurred when the disease raged as an epidemic. The one given below was a saporadic case.

Case 3d. April 23d, 1849. I was called to see Mrs. J. who was taken sick the day before, with what they suppose to be the chill and fever. She was taken with a chill followed by a high fever and severe pain in the head, and this morning had another chill about the same time. The chill had passed off when I saw her. The pain in the head was very severe; she was tossing from one side of the bed to the other screaming aloud with the pain in the head, said "that her head would burst!" The pain extended down the back; the muscles of the back were contracted so as to form the trunk in a curve. The tonsils were slightly swelled; the tongue was covered with a white fur and moist; the pulse 120, and somewhat hard. All the secretions seemed to be suspended. As there were no symptoms present indicating the sinking of the vital energies of the system, I took 18 ounces of blood from the arm; directed a powder of Calomel 12 grs., Pulv. Opium ½ gr., Pulv. Camphor 2 grs., every 3 hours until 5 doses were taken, to be followed with Castor Oil if they do not operate; cold applications to the head; a blister to the back of the neck; Liniment to the throat and spinal column, below where the blister was applied; the surface to be sponged off frequently, with warm vinegar and water.

24th.—Visited Mrs. J. at 8 o'clock this morning, found her

no better. There was a slight chillness about the same time this morning that she had had the chills before. The fever did not remit any; more stupor and delirium than yesterday. The medicine had operated freely on the bowels----had to take the Oil; blister drew well. Continue the powders, cold applications to the head and sponging the surface with warm vinegar and water.

4 o'clock P. M.----Very much the same; fever high, and some hardness of the pulse. I took 12 ounces of blood from the arm, and ordered a powder of Quinine 8 grs., Precip. Carb. Ferri 3 grs., Morphine $\frac{1}{8}$ gr. to be commenced 7 hours before the chill, if there was the slightest remission in the fever and given every three hours, and continued until the exacerbation next day.

25th, 8 o'clock in the morning.----The symptons very much as yesterday; no chillness this morning; a slight remission in the fever; had taken three of the Quinine powders, and I directed the fourth. Ordered the Calomel, Camphor and Opium in previous quantities to be commenced at 10 o'clock, and 4 powders to be given.

4 o'clock P. M. Found her with less fever than on yesterday; less delirium and opisthotonos. Directed the Quinine powders to be commenced at 12 o'clock to-night, and given every three hours until the exacerbation to-morrow.

26th. She is decidedly better this morning; less fever; no delirium; less pain in the head; and the opisthotonos entirely relieved. The Calomel operated without the Oil---- large quantities of dark, pitchy bile passed off from the bowels, of the consistence of tar. The throat is better. Continue the same treatment.

27th. She continues to improve with the exception of an erysipelatous inflammation of the throat under the chin, which commenced about the time the pain left the head. It is very painful, and appears to be spreading very rapidly; has no ap-

petite----operations from the bowels are still dark and pitchy. Directed but two of the Calomel powders to-day. And the Quinine in 4 grains was combined with the Iron in 8 grain portions every 4 hours. And a strong solution of the Nitrate of Silver to the inflamed surface every 6 hours until it stops the inflammation.

28th. She still continues to improve; inflammation has spread in every direction since yesterday, but does not pain and burn so much as before the solution was applied; very black from the effects of the Nitarte of Silver. Some appetite to eat. Discontinued the Calomel powders. Continue Quinine powders, also the Nitrate of Silver solution to the inflamed surface.

29th. The inflammation has spread none since last visit; improving rapidly in every respect----appetite good. Discontinue all medicines excepting some to regulate the bowels.

31st. Still improving. Gave the case up as cured.

I could add other cases but this paper has swollen beyond the limits intended.

Indian Point, Menard Co. Ill., May 26th, 1851.

ARTICLE II.

Singular Influence of the Aurora Borealis. By R. S. MILLER, Esq., Telegrapher of Chicago.

The origin of that singular and beautiful Phenomenon, the "Aurora Borealis," (more familiarly termed the "Northern Lights") seems yet a mystery not only to the millions, but also to those who have given it a patient and careful investigation.

The different theories which have been advanced from time

to time are now almost entirely abandoned, and the apparent want of sufficient data upon which to found anything plausable, has in a great measure checked the progress of inquiry. Some years since it was accidentally discovered that the polarity of the Magnetic needle suffered a material change during the presence of the "Lights." This gave a new impetus to investigation, but further than the simple fact itself, nothing new has been developed.

That it is an Electrical Phenomenon, is the only theory that prevails at the present day. It has met the support of Herschel and other distinguished Astronomers whose opinions are entitled to no little consideration.

During the very striking and brilliant exhibition of this Phenomenon on the night of the 30th ult., a new feature occurred under the immediate observation of the writer, which may be of interest to the scientific and furnish additional evidence in favor of the theory above mentioned.

On the night alluded to, the different Lines of Telegraph were affected in a singular manner, and to such an extent as to compel them to suspend operations for several hours. The derangement (as indicated by the Electro Magnets) at first appeared similar to that which would be expected to result from the crossing or contact of the wires of different Lines in the immediate vicinity of powerful batteries. An examination served to show that the difficulty could not proceed from such a cause. At one moment it was impossible (by the use of the usual tests) to detect the presence of the slightest current of magnetism on the wires. It would then gradually manifest itself and steadily increase for perhaps two minutes, at which time its intensity would be extraordinary; the Magnets exerting an attractive force equal to five or six pounds; (it is usually about one ounce.) It would then gradually diminish and finally disappear.

These alternate effects were regular, and the Magnets con-

nected with the different Lines extending in different directions acted in perfect concert; thereby showing that the derangement was not confined to any particular locality; a fact more fully proven when it was ascertained that the same effects were being observed in St. Louis, Cincinnati, Milwaukee and other stations eastward.

By some, these effects might have been attributed to electricity; but it would have been a forced conclusion. A perfect equilibrium appeared to prevail everywhere, and none of the usual indications of the presence of that agency were observed.

It would be tedious to enumerate all the experiments made on the occasion. Suffice it tor the present to say, that the result has convinced the writer that the derangement was occasioned by "*Magnetic Electricity*," but where or how it was developed, or whether it be a cause or an effect of the Phenomenon in question is left for others to determine.

ARTICLE III.

Occlusion of the Os Uteri. By E. G. MYGATT, M. D.

On the 31st of August last I was called to see Mrs. —— aged 40, of the sanguine temperament, and a good constitution, in labor with her first child. She had lived with her first husband twelve years and with the present one eight, and this as she informed me was her first pregnancy. The pains were short with long intervals. An examination showed the Uterus to be high up and the Os Uteri not reached.

In the course of twenty-four hours the pains had become strong and frequent, recurring every three or four minutes; patient vomiting occasionally; free from headache or frebile

excitement; pulse quiet; skin of the natural temperature; said she felt the motions of the child. Examinations now showed a round, soft, smooth, imperforate tumor or sac. It was soft and fluctuating in the absence of pain, very easily carried before the finger as far as it could be introduced, but dense though elastic during pain and brought within half a finger's length of the vulva.

On the morning on the next day, Sept. 2d, my friend Dr. H——, who has been above thirty years in practice was requested to see my patient. He however, found himself as much in the fog as I had been, as no trace or resemblance of an Os Uteri could be found.

As there was no rigidity of the presenting part and only a slight acceleration of the pulse, we did not bleed our patient but agreed to empty the bowels, keep her quiet, and see what time would develope. Thus passed another twenty-four hours, when we called in consultation Dr. S——, an experienced practitioner who made an examination without knowing our opinion. He informed us that he was unable to find an Os Uteri.

As the strength of the patient remained good, and the fœtus not impacted, it was agreed to quiet the pains with Morphine and mitigate her sufferings with Chloroform and wait further time.

The pains were now irregular, occurring with force and then ceasing altogether for hours. I had previously instituted a thorough examination with the index and middle fingers introduced, changing hands that I might ascertain with certainty that the vagina was attached to the presenting part all around. Perhaps it may not be quite orthodox to use or recommend the introduction of the middle finger along with the index, but where the Os Uteri is high up or far back we may gain at least half an inch in this way without any inconvenience to the patient. It enabled me in this case to ascertain that no part of the child engaged fairly in the superior strait.

I had noticed in my examinations a slight sulcus or groove about half an inch long on the lower portion of the presenting part. It felt something like a depressed cicatrix, apparently solid and impervious, whilst the surface immediately around it was as smooth and soft as any other portion.

On the morning of the fifth day the use of the Vaginal Speculum was proposed, that we might bring it to bear upon the little furrow, and ascertain its nature; this was objected to on the part of the patient.

During the afternoon of the same day the pains were strong and propulsive, and while we were consulting as to the necessity and propriety of an operation, we were notified that something was passing. It appeared to be a fluid without much fetor, resembling bloody pus. Some 6 or 8 ounces passed during half an hour. I now sat down to my patient and pressed rather firmly on the sulcus during a pain with the point of my finger, when to my surprise and delight the adhesion gave way and permitted my finger to pass the hitherto occluded Os Uteri; the pains were now effective; dilatation rapid; the breech presented and a still born child of the average size was delivered about two hours after the opening of the Os Uteri.

Nothing unfavorable has occurred since her delivery, but she has had a good "getting up," better than the average of cases.

All the evidence that could be gathered respecting inflammation of the Os and Cervix Uteri is that she suffered rather more than is usual from Dysuria during the early part of her pregnancy and the husband informed me that sexual intercourse had been quite painful to her.

If we had made an early and free incision through the presenting part of the Uterus we should have been justified by good authority and there is some probability that we should have saved the life of the child. It is however, quite uncer-

tain whether it would have been as well for the mother unless the incision had traversed the exact line of the closure.

As this is a rare case, so rare indeed that Dewees, Burns, Denman, and others of great experience and observation, had never witnessed it, I judged it worthy of record in some Medical Journal.

Richmond, McHenry Co., Sept. 22d, 1851.

ARTICLE IV.

Collodion in Small Pox and other Cutaneous Diseases. By E. McArthur, M. D., Chicago.

On the 20th of May last I was called to visit Mr. ——. I found him laboring under the usual symptoms peculiar to a severe attack of Bilious Fever. He was some 30 or more years of age and possessed a strong and vigorous constitution. I inquired if he had been exposed to any person sick of Small Pox. He replied he had not. His symptoms being those peculiar to Fever of high arterial excitement and at the same time his tongue being covered with a thick coat of brown fur, and there being much nausea and some vomiting I ordered Calomel and Ipecac ää grs. xvi M., to be given in powder. After a full half hour he commenced vomiting, at which time he was directed to take a little warm water occasionally to facilitate and render vomiting as easy as might be. He threw up a large quantity of yellow and then copper colored bile. I directed him to take Castor Oil ℥i. in four hours. His physic operated well and he took Dover powders and drank Cr. Tartar in solution, to promote perspiration and lessen fever. Next morning his pulse were very strong and quick, skin hot and dry, and no intermission of febrile symptoms. At even-

ing his fever continued high and pulse strong, full and quick. There was a slight discoloration in each groin of the size of the palm of the hand. On the morning of the 22d I observed it was a case of Small Pox, and that the probability was, that it would be one of a serious character. I hastily directed the application of Collodion to the whole face and neck. Four bottles of Collodion were used the next few days, it being applied every 4 hours. The patient remarked almost every time it was applied, "it feels so cool and good."

The disease progressed and proved to be, one of higher arterial excitement and severer in character than any I had ever seen, where the patient recovered, and I had treated several patients with the disease, each year for several years previously.

I have called attention to this case, not supposing that there was anything peculiar or differing essentially from others, sufficient to interest the Profession in the case itself. My object being to add the result of my experience, to that of others, and thus direct the attention to the use of Collodion in diseases of this kind. My patient was pleased in its use and I believe he was pitted far less than he would otherwise have been.

I have used the same remedy for different cutaneous disease, in most of which or all, it appeared to have a salutary effect by keeping the atmosphere from the part effected and at the same time, producing a cooling and agreeable sensation to the heated surface.

It has had a good effect in my practice in bad cases of cracked and otherwise sore nipples, and if used early, for inflamed breasts of nursing women.

ARTICLE V

Extract of Beefs' Blood in the treatment of Anæmia. By Dr. Von Mauthner, of Vienna. Translated from the French by H. A. Johnson, A. B., Interne to Illinois General Hospital.

Dr. Von Mauthner, Director of the Hospital, St. Amne, of Vienna, has employed for some time the extract of Beef's Blood in the protracted Anæmias of children. According to this distinguished practitioner a large number of diseases are caused by an Anæmic state, rather than is generally believed, by irritation, and ought, therefore to be treated by other than antiphlogistic means. Unfortunately, science has furnished, as yet but few remedies, capable of combatting successfully Asthenic diseases, having their point of departure in the constitution of the blood.

M. Von M. has employed with success the Ammonio Chloride of Iron in the treatment of children, presenting periodical symptoms of congestion, without any appreciable organic cause, and in debility attending intermittants, but he has become convinced that there are Anæmic conditions in which the patients do not bear the use of any of the preparations of Iron, and it is in such states that the Extract renders the most efficient service.

The extract is prepared in the following manner: Blood, fresh from the animal is thrown in a filter, and the residue evaporated to complete dryness. It is administered in the form of powder, or dissolved in water, in quantities of from grs. 10 to ℥i. per day. Under the continued use of this means the patients improve very much in appearance and gain rapidly in strength. This result ought to astonish no one when it is considered that the extract supplies just those substances which are wanting in the blood of these little sufferers, viz: the hæmatine and the fibrine.

According to Dr. Von Mauthner, this preperation is especially adapted to the following Anæmic morbid conditions:— 1st. Anæmia succeeding chronic diarrhœaof children of a certain age. It is on the contrary of but very little use in very young subject and in such as have just been taken from the breast. 2d. Anæmia after Typhus. The author who is perfectly convinced of the advantages which it offers in this case, assures us that it may be administered without any danger of fatiguing the digestive organs. 3d. Anæmia which follows severe pneumonia, when the lungs are not as yet restored to their normal state, and the patient is troubled with cough and fever; but it is to be remarked that the remedy is not equally beneficial in tuberculosis. 4th. Anæmia succeeding wasting supperation, and scrofulous ulcers. 5th. Anæmia after serous accumulations produced by scarlatina. In this condition of the system it seems to surpass all other remedies in use, since, contrary to the effect which has been observed of other tonics, it produces no irritation of the kidneys, a result often leading to hæmaturia and albumenuria and constituting a new disease.

This remedy, so simple in its use, and costing only the labor of preparing it, merits, as it seems to us, the attention of practitioners, especially for the poorer classes, among whom Anæmic effectations are unfortunately so common.

Anales, Med. de la Flandre Ocid.

ARTICLE VI.

A Case of Rubeola, complicated with premature Labor, successfully treated by Inunction. By O. POPE HATHEWAY, M. D., of La Salle, Illinois.

September 3d, 1851. Case of Mrs. S——t, aged 20. I was called upon to visit this lady about eleven o'clock A. M. I found her laboring under a violent attack of Measles. Four days had elapsed since the first premonitory symptoms made their appearance. This day the peculiar eruption appeared on her face, neck, breast and arms. Her eyes were injected, suffused and intolerent of light. Face considerably swollen; thirst intolerable; pulse 120 per minute and feeble. The feebleness of the pulse and the great thirst were agrivated by the existence of a severe diarrhœa which had been running on her for the last five hours. Distressing nausea was constant and she had vomited every fifteen or twenty minutes for two hours. The distressing cough which generally accompanied this form of Rubeola was so severe that it threw her in to convulsions every three or four minutes. Besides the above symptoms for the last two hours she had experienced severe labor pains. The paroxysms were intermitting, when I arrived, the time intervening being about ten minute t was her first pregnancy and by inquiry I ascertained that she could not be beyond the eighth month, and she thought not over seven and a half months. I immediately administered a full dose of Pulv. Opium, and waited to observe its effect. The pains only returned once. I now ordered the nurse so soon as the patient should become sufficiently rested to procure a piece of bacon armed with the rind, and with this to rub the patient thoroughly over the entire surface. I remained with her about one hour and finding the labor pains were

quited, I returned to my office, leaving direction however, that if they should return, another full dose of Opium should be administered. The bacon was applied about one o'clock P. M. Between three and four the labor commenced again. Opium gr. iij. were immediately given with the same result as before. The distressing symptoms of the Measles began to abate within two hours after the first inunction and finally all disappeared without another bad symptom showing itself. At eight o'clock in the evening I was summoned to her bedside in great haste. I found the labor pains had returned with renewed energy and frequency. I immediately made an examination per vaginam; found the os uteri dilated to the size of a half dollar piece, soft and flaccid. I now determined to let the labor proceed for I was confident that all my efforts to the contrary would be unavailing. The labor terminated about 3 o'clock in the morning. The child was in a state of asphyxia, but the usual remedies for resuscitation being resorted to, proved successful in a few moments. The after birth was delivered in the course of an hour, but not without some interference. Hæmorrage but slight and easily controled. Convalescence, notwithstanding the presence of Measles was as speedy as the majority of cases of natural labor.

The characteristic eruptions of the Measles which were so well marked, on her face, neck, breast and arms all disappeared during the night. Her cough was now the only distressing symptom. Inunction was resorted to again this morning, (Sept. 4th.,) and the following mixture prescribed for her cough: ℞ Tinct. Opii., Tinct. Lobelia, Tinct. Sanquinaria, Aqua. Camphor and Syr., Scilla Comp. ää ℥i., Simple Syr. ℥js., Aqua Dist. ℥i. M. Of this I ordered a teaspoonful every two hours. Nothing was seen of any Measles after this date. Her breast began to secrete milk the second day; the mother and child are now both doing well.

REMARKS.—This case is interesting to the Profession in at least two particulars, viz: The happy result of the treatment by inunction and the complications of the case. That this will finally be the treatment of Rubeola I have no doubt. I consider it no longer an experiment.

ARTICLE VI.

Meeting of the Physicians of Whiteside County, Illinois.

COMO, ILLS., Sept. 27th, 1851.

Pursuant to previous arrangement the Physicians of Whiteside County met at Union Grove, July 22d, 1851, for the purpose of organizing a County Medical Association, Doct. A. Smith, Prest. pro tem and Doct. H. C. Donaldson, Sec'y.

Committee to draft Constitution and By-Laws reported, which report after some amendments was adopted.

On motion of Dr. Abbott the code of ethics adopted by the Rock River Medical Society was adopted by the Whiteside County Medical Society.

On motion, the Society proceeded to the election of Offi cers for the succeeding year which resulted as follows:

DR. A. SMITH, of Lyndon, President.

" J. C. BARDWELL, of Prophetstown, Vice President.

" A. G. PORTER, of Como, Secretary.

" H. C. DONALDSON, of Lyndon, Treasurer.

Board of Censors—Doct's. Hudson, Abbott and Donaldson.

President appointed Dr. Abbott to read an original Essay before the Society at its next meeting. The annual meeting of this Society is on the first Tuesday in each June, and the semi-annual meeting on the first Tuesday in December.

The following Resolutions were unanimously adopted, viz:

Resolved, That should any individual refuse to pay the just bill of his Physician by taking refuge behind the late Homestead Ex-Emption Act, it shall be just and proper for such Physician to refuse further attendance until payment or satisfaction is rendered.

Resolved, That any neighboring Physician on being duly informed of such refusal to pay, shall decline any attendance until the first Physician is paid or his debt secured.

Resolved, That the North-Western Medical and Surgical Journal be furnished a copy of the above for publication; also, the Chicago Democrat, Chicago Tribune and the Chicago Journal.

On motion, the Society adjourned to meet at Lyndon on the first Tuesday in December, 1851.

A. SMITH, *President.*

H. C. DONALDSON, *Secretary, pro tem.*

ARTICLE VII.

Clinical Lecture in the Medical Ward of the Illinois General Hospital. By N. S. DAVIS, M. D., one of the Physicians to the Hospital.

October 13th, 1851.—*Gentlemen:* The case before you, and the one to which I shall chiefly direct your attention this morning, is somewhat complicated and possessed of much practical interest. The patient is a female, aged about 24 years, unmarried, a native of Ireland, and before being afflict-

ed with the disease was employed as a servant girl. You see in her countenance an expression of sadness or dejection, and in her arm, here, evidences of great emaciation, there being little left beside the bones, muscular fibres, and skin. Her pulse is 80 per minute, small and easily compressed; her tongue smooth, red, and moist; gums swollen, dark red or purple and spongy; skin dry and harsh; abdomen distended and somewhat tympanitic; bowels habitually very costive; thirst excessive, and appetite craving with painful and imperfect digestion. The urine, a specimen of which is contained in this vial, is pale or limpid like water, and very copious, amounting to about two gallons daily. Its specific gravity, as ascertained by Mr. Johnson, at present *Interne* of the Hospital, is 1030, that of healthy urine averages about 1020. According to the rule adopted by Dr. Christison for ascertaining the quantity of solid matter in 1000 parts of urine, the excess of specific gravity over 1000, is to be multiplied by 2.33, which would make this specimen contain 69,90, a considerable excess over the average of health. It also possesses a sweetish taste indicating the presence of sugar. To determine this important point with more certainty, however, we must resort to other tests. If I place a drachm or two in this test-tube, add to it a small quantity of the Solution of Caustic Potash contained in this bottle you see no immediate change, but on holding it in the flame of a spirit lamp until it is heated to the boiling point you see it rapidly assuming a deep orange yellow or redish color. This is called Moore's test, but it is not as reliable for detecting sugar as that devised by Tommer, which I will now apply. I place another drachm of the urine in this clean test-tube and add enough of the saturated Solution of Sulphate of Copper to give it a slight blueish color. I now add a Solution of Caustic Potash which throws down a copious green precipitate of ammoniate of copper, which by continuing to add the alkaline solution in excess, is re-dissolved leaving

as you now see, a clear green solution. If I now hold this in the flame of the spirit lamp until the Ammonia is driven off the sugar in the urine is decomposed, part of its Oxygen unites with the Copper forming an insoluble red Oxide, the presence of which is indicated by the rapid change from the green to a very distinct red, as you see taking place here. The changes here detailed and exhibited to you are a very certain indication of the presence of sugar in the spicimen of urine examined.

And the results in this case enable us at once to arrive at the certain and important conclusion that the patient, just now before us is laboring under an aggravated degree of Diabetes Mellitus. She was admitted to the Hospital only three days since, and her history, as nearly as can be ascertained, is briefly as follows, viz: Eighteen months since while engaged in washing windows in one of the Hotels in our city, the usual period of menstural flow arrived, commenced in its usual regular and natural manner, but the patient continuing to work in the wet and cold it was entirely suppressed before the end of the first 24 hours, and has never returned since.

This was the beginning of ill health, she having previously enjoyed as good health and as regular a flow of the menstural fluid as could be desired. Sickness, however, soon followed the suppression and a Physician was called on who prescribed cathartics, alteratives, and emmenagogues, but with no other effect than the palliation of symptoms. During the first six months she had one or two attacks of fever, the last of which left her much debilitated and with a dry harrasing cough. The latter continued with gradually increasing emaciation until about six months since, when the cough gradually diminished and has now entirely disappeared. The emaciation, however, has continued to increase; she has become more and more anemic, and her vital energies more impaired until she presents the appearances and symptoms al-

ready detailed. The most careful examination, aided by Auscultation and Percussion, does not enable us to detect any tubercular deposits in the lungs or enlargements of any of the abdominal or pelvic vicersa.

It is now impossible to ascertain at what period in the progress of this case the Diabetic affection commenced, or how far it has operated to prevent the return of the Menstrual secretion. It is most probable that the sudden suppression was first followed by those congestive and inflammatory attacks which ordinarily occur in such cases. These were combatted and to a great extent, at least, removed by medical treatment, but the Menstrual function not being restored, the functions of the stomach and lungs next became permanently impaired, giving rise to costiveness, indigestion, and cough; at first directly threatening the development of tubercles and consumption, but the indigestion assuming that peculiar form or state, which, Prout and others suppose, gives rise to the conversion of the Carbonaceous portions of food into sugar, and its consequent introduction into the circulation in such quantities that it cannot be further assimilated or appropriated for nourishing the tissues, it soon stimulated the kidneys into excessive action, thereby commencing the diabetic affection which is now so plainly and fully developed. As a consequence of this protracted chain of morbid action, we have now great emaciation; an impoverished and anemic condition of the blood; impairment of the solid textures indicated by the purple and spongy gums; impairment of nervous energy both as regards the nerves of organic and animal life, and consequent loss of the peristaltic muscular actions producing obstinate costiveness and flatulency; while Menstrual suppression still continues and the food which is taken in large quantities is converted into sugar only to be eliminated in the copious renal secretion. Such is the most rational pathological view of the past history and present condition of the case before us.

And what are the prospects and curative indications which it suggests?

The Prognosis in all cases of Diabetes Mellitus is unfavorable. The disease seems to have its origin in the defective or altered state of the digestive and assimilative functions, the precise causes and conditions of which are yet involved in obscurity, and hence we are without a completely rational and successful mode of treatment. The special Prognosis in the case before us is still more unfavorable from its origin and uterine complication. The remarks already made, however, readily suggest several well defined and important indications for treatment.

The first is, to cut off the supply of materials most readily converted into sugar, by a proper regulation of diet. Such materials are made up of the Carbonaceous class of aliments, and especially that variety chiefly composed of starch, as the farinaceous vegetables and tuberous roots. These, together with saccharine matters, should be carefully excluded, and the patient confined to an animal diet as exclusively as is consistent or compatible with the continuance of healthy digestion. A diet exclusively of muscular flesh is indicated by the disease, but there are very few patients who can maintain digestion any considerable length of time without a small supply of bread or other farinaceous article as a part of their food. The drinks should be bland and unstimulating, but may be allowed in liberal quantities without detriment and greatly to the comfort of the patients.

The second indication is to restrain the inordinate secretory action of the kidneys. For this purpose we have no other remedy equal in efficiency to Opium, given in moderate doses and repeated at regular intervals. Universal experience has given it the foremost rank as a paliative in the treatment of this disease. Its tendency to increase the constipation of the bowels is, however, a strong objection to its use, and some-

times renders its omission necessary. In many cases the Alkaline earths, especially the Oxides and Carbonates of Magnesia, are decidedly beneficial in lessening the urinary secretion, while they also tend to relax the bowels.

The third indication is to increase the tone of the digestive organs, improve the quantity and quality of the blood, and thereby arrest the emaciation and restore the healthy condition of the solid tissues. Aside from the proper regulation of diet, of which I have already spoken, the remedies best calculated to fulfill this indication are the different Salts of Iron and the bitter vegetable tonics. Of the preparations of Iron I have found none better generally that the Muriated Tincture in doses of from 10 to 20 drops three times a day. Within the last few days my attention has been called, by H. A. Johnson the intelligent Interne of these Wards, to an article which he had translated from a French Journal, detailing the use of a new remedy for Anæmia, called extract of Sanguinis. It is prepared by taking fresh beef's blood, allowing it to coagulate separating the serum through a filter and drying the clot by evaporation until it can be readily reduced to a dry powder. Of this from ten to twenty grains are given three or four times a day. You will readily perceive that this, so called extract, is simply the red-corpuscles and fibrin of the blood, retaining all the Iron and a portion of the other saline constituents, in that form most nearly resembling their condition in the blood of the healthy living subject. Hence it contains the very constituents most needed to upbuild and improve such cases as the one before us.

The fourth, and last indication, is to restore the long suppressed Menstrual secretion. This, however, cannot be done unless the solids and fluids of the system are greatly improved and replenished first. The quantity and quality of the blood must first be so far restored as to furnish the materials for a healthy menstrual flow, or the whole list of direct and in-

indirect emmenagogues will be resorted to in vain. Indeed, in the present condition of the patient the very best remedies for fulfilling this indication, are indentical with those best calculated to fulfill the third as already alluded to.

With this brief exposition of the case, I shall direct the patient a diet of animal food consisting of Beef, Mutton, or Chicken either fresh or salted, and meat broth, with a very limited qnantity of wheaten bread. She will take of the Extract of Sanguinis, just described, 20 grs. three times a day; and a small powder of Aloes and Castile Soap or Carb. Magnesia as often as may be necessary to obviate costiveness. If the bowels become less constipated and the urine continues as copious as at present, half a grain of Opium may be added to each dose of the Extract after a few days.

The further progress of the case you will have abundant opportunities of observing during the term of Clinical Instruction which is now but just commenced.

Part 2—Reviews and Notices of New Works

ARTICLE I.

Proceedings of the Illinois State Medical Society at its first Annual Meeting held in Peoria, June 3d, 1851. Published under the supervision of the Committee on Publication. Chicago, Jas. J. Langdon, Book and Job Printer, 1851. pp. 59.

We are in receipt of a copy of this document. It has been late in making its appearance, partly as we understand owing to the delay in gathering together the papers, from different individuals, of which it is principally composed. We could have pardoned a much longer delay, however, if it would have secured more accuracy in the printing.

There are some mistakes of rather an amusing character. In Dr. Thompson's report, it is said an Autopsical examination of the brain found "the pea-water engorged."

The first twenty-two pages of the document are occupied by the minutes of the proceedings of the Society and Prof. Herrick's Address, both of which have been reported in the Journal. The remaining portion is made up of three papers, viz: Chloroform in Surgical operations, by E. S. Cooper, M. D., The Report of the Committee on Practical Medicine and a partial Report from the Committee on Obsteterics, by R. Rouse, M. D., after which follows a list of the members of the Society.

The paper of Dr. Cooper says, the author "has had an opportunity of testing the effects of Chloroform as an æsthetic agent in seventy-nine cases of Surgical operations since the organization of the State Medical Society. Most of these, of minor importance, so far as the operations are concerned, but

displaying no less, as the writer thinks, the merits of the article itself in producing insensibility."

The only remarkable case among these was one which is reported, in which the rapid inhalation of Chloroform produced prostration, suffocation, and asphyxia which only gave way by the most active stimulation.

A subsequent attempt proved that the Chloroform could be safely used in the case by commencing its inhalation gradually. The case is instructive and worthy of note.

The Report on Practical Medicine by Dr. Samuel Thompson, Chairman, first discusses the subject of Intermittant and Remittent Fevers. The difficulty of defining any of these as congestive Fever is clearly pointed out, and the terms Malignant Remittent or Intermittent proposed as a substitute.

The prevalence of a form of disease called Typhus or Typhoid Fever within the last few years, in different parts of Illinois, is noticed, but the reporter is not able clearly to make out its nosological character.

The disease called Milk Sickness receives the attention it deserves. But we should incline to differ from the author who calls it a "truly epidemic disease," as our own observations and the history we have read of its prevalence would compel us to call it strictly endemic in its character. It is by the showing of the report itself, confined to circumscribed localities.

The author of the report, whom our readers will recollect published a long and exceedingly well written article upon the subject of Malaria in the number of this Journal for May, 1850, seems to have contracted a Miasmataphobia as he attributes to it the production of many of the diseases noticed, among which may be mentioned, not only the Fevers of the West, but Milk Sickness and Asiatic Cholera. In the article above referred to the position is taken in reference to the Milk

Sickness and it is re-asserted in the report before us. The treatment of the malady is discussed at length with reports of the practice of various practitioners.

The conclusion to which the author arrives is that Bicarb. Soda freely given with a little Sulpharic Acid to form an efferversing draught and also a Sulphate of Soda to act as a cathartic, with Quinine and Calomel are the principle remedies of importance. Tonics in the latter stage of the disease are recommended.

The course of treatment for this disease that we found safest and the most speedily successful, was suggested to us by Dr. N. Wilson now of Iroquois Co. Ill., who had acquired an extensive reputation for the success of his treatment of Milk Sickness on the Wabash River in Indiana. The most prominent symptoms of the disease are the nausea and vomiting and the obstinate constipation, the former of which are much in the way of the use of remedies for relieving the latter, which in turn seems to keep up the sickness; as catharsis usually brings relief. The treatment referred to was, to select some mild innocous cathartic, as equal parts of Pulv. Rheubarb and calcined Magnesia which Dr. W. prefered, and repeat the dose of it as often as rejected by the stomach, or at least at short intervals, until free catharsis was secured, when the danger is generally overcome. After this some mild tonics with a sufficiently free use of laxatives to prevent a return of coprostasis, completed the cure. The use of Calomel was early abandoned, on account of the danger of producing ptyalism from its remaining too long in the system before operating, and the conviction that any other cathartic that could be retained so as to act, was equally efficacious. Relapses, to which patients are exceedingly liable from much exercise after an attack of the disease, may be prevented by attention to keeping the bowels open regularly, which should always be strictly enjoined in discharging convalescents from this malady.

After some remarks upon Pneumonitis, Scarlatina, Rubeola, and the use of Iodine injections in dropsical affection, by Prof. Brainard, the report takes up the subject of Cholera and devotes the remaining twelve pages to its consideration. But little is said of its treatment, and nothing seems to have thrown new light upon this dark part of the subject.

The cause of the disease claims the principal share of attention, and singularly enough in a document professing to be a report of what has transpired, the author has compiled a most imperfect history of the appearance and progress of the disease, selecting mostly such parts of the written history, as give plausibility to his own peculiar views of the origin of the disease, or arguments against those entertained by others, italicising the phrases and sentences that are designed to bear upon the questions at issue.

He first undertakes to disprove the contagiousness of Cholera and subsequently to establish its malarious origin. His success and means of accomplishing these undertakings we will endeavor to make apparent.

In giving a history of its introduction into Illinois, the author refers to its appearance at Quincy and Galena early in the spring of 1849, where the reporter says in italics, "it did not appear to spread," omitting to notice the fact that it was brought to Galena by emigrants from the lower Mississippi where the disease was at the time prevailing.

In giving the history of its appearance in Chicago, the author gives credit to the editor of this Journal for his facts, but singularly enough asserts that "it did not appear to spread much in Chicago till the 5th of June." My statement is, that "the disease had prevailed in other parts of the city for two months before this (the Norwegian) neighborhood, (where it prevailed with the greatest mortality) was affected." We would gladly omit this correction but justice to the cause of truth seems to demand that history shall not be mis-quoted

That the Cholera has generally, as in Chicago, prevailed more extensively in hot weather than in cold, is a fact so universally admitted that it was not necessary to mis-state the facts of the case to make it appear; nor even to put the phrase "till the heat of July had set in," in italics.

It is very singular that the reporter should have made no mention at all of the introduction of Cholera into the numerous isolated settlements in the State, the history of which in a large number of instances, well authenticated by numerous references, was before him. The only explanation of this omission that appears plausible is that they furnish no evidence of the Malarious origin of the disease and most clearly and forcibly corroborate the doctrine of its communicable nature.

The arguments of the report drawn from the coincidence of the prevalence and origin of Cholera in several places where "the atmosphere was humid, murky, close and oppressive," and in some marshy and malarious places, and his showing that high, dry and sandy places might be sources of malaria from the vegetable products being washed into the substratum to putrify, are fair specimens of the arguments generally urged against the doctrine of contagion.

The first is deficient in not being by any means a uniform attendant upon the prevalence of the disease as its fearful mortality in Norway and Sweeden during the intense cold of winter, and many other instances in its history prove; and the second affords no explanation of its frequently sparing marshy and generally unhealthy districts, and often affecting otherwise the most healthy spots on the face of the earth.

Great stress is laid upon the fact, that exposure to Cholera does not always propagate the disease, which may be set down as *the argument* of the non-contagionists, which, however, only proves that there are favorable and unfavorable conditions for its propagation. The same may be said to obtain in

a greater of less degree in reference to all contagions, and if more striking in Cholera it only proves that it is peculiar in this as in many other respects.

In summing up the evidence in reference to the disease, furnished by a table of its prevalence in one part of the City of Chicago in the article so frequently referred to in the report before us, the inference was drawn that the period that elapsed between exposure and attack was generally one day. This statement is seized upon by the author of the report and the conclusion arrived at that "either the assumed time of incubation is a total error or the cases upon which the arguments for its primary importation and communicability are founded are totally irrelevant to the question." If a stated period of incubation had been determined and no reference to the necessity of a proper condition of the system for the action of the poison made; nor the fact that contagious formities may be imported referred to, the conclusion of the author might be a very good one; but as this is only a comment upon the result of the statistical table above referred to, and all of the other points were maintained in the article from which the extract is made, it is a very violent conclusion and shows the necessity of unfair means to make out an argument. This necessity is further corroborated by the fact that the extract from the article as given in the report, and from which the conclusion is drawn, is garbled and thus rendered absured in its meaning. The following is the extract, which is twice quoted in the report, taken from the middle of a paragraph of comments upon the "Table showing the number of those exposed—The time between exposure and attack, and the duration of the disease in those who died in three blocks in Chicago." It will be seen that such an extract is an unwarranted perversion of the meaning of the author. It is as follows: "The emigrants came by way of New York and Buffalo a few days before taken, where the disease was prevailing

when they passed. It shows the length of time between exposure and attack to be generally about one day which strictly corresponds with the history which follows." What shows? Why according to this extract the emigrants coming by way of New York and Buffalo; when with the context no one could reasonably mistake its reference to the table immediately above the paragraph, from the middle of which these two sentences are taken.

Immediately after the second insertion of this extract the author congratulates himself upon having disposed of the doctrine of contagion, saying "Much more might be adduced had we time or space but we conceive it needless."

Whether the author of the report aimed at ascertaining the truth in regard to the question discussed, or at vanquishing by special pleading the advocates of the doctrine of contagion, his document is so worded as to convey the impression to the reader that he conceived the latter to answer his purpose best, for he has apparently hunted for weak points in the arguments and left unnoticed those which are inexplicable upon any other hypothesis.

That Cholera is produced by a specific and not a general cause, we think must be apparent to any one who has taken the pains to examine the history of its spread from place to place in its marches from India to California. That it is portable we think clearly established by its invariably following in those marches the channels of human intercourse; by its being introduced into isolated and remote settlements, as at Folly Island and almost innumerable instances that have occurred in our own country, many of which have occurred in Illinois; and that it is communicable from person to person we think clearly manifested by its extending from points of introduction, in most instances traceable, through direct channels of communication to adjacent neighborhoods. We have in vain sought for a satisfactory explanation of these historical

facts by any other than the doctrine of communication. The only one that *appears* to answer the purpose is that of Prof. Mitchell of Philadelphia, attributing to cryptogami the poison, which amounts to little more than an attempt to explain the essential nature of the virus by which communication, or as he calls it, importation takes place.

These facts have been disregarded by the author of the report, while coincidences in particular cases showing that certain conditions are sometimes present, and instances where the disease did not spread, with points of dissimilarity between it and some other diseases, acknowledged to be contagious, from the sum and substance of his arguments. Now coincidencs are of no account to the argument unless they generally occur; that a disease does not spread in every case of exposure does nothing toward proving that it is not by contagion that it is propagated where it does prevail, and that it is dissimilar to other contagious diseases, only proves its specific character, and that it differs in those respects from them, leaving the general fact of its being diffused from county to county and from place to place by channels of direct communication undisturbed and unaccounted for.

The Report of Dr. Rouse is a short, sensible statement of his high appreciation of the value of Chloroform in mitigating the pains of Parturition. He bears testimony to its safety and utility in the strongest terms of commendation.

ARTICLE II.

On the Theory and Practice of Midwifery. By FLEETWOOD CHURCHILL, M. D., M. R., I. A., Hon. Fellow of the College of Physicians in Ireland, Member of the American National Institute, etc. With notes and additions by D. FRANCIS CONDIE, M. D., Sec'y. Col. Physicians, Philad., etc., etc. With one hundred and thirty-nine illustrations. A new American, from the last improved Dublin edition; pages, 510 octavo. Blanchard & Lee, Philadelphia, 1851. (From the Publishers, through S. C. Griggs & Co., Chicago.)

This is a new edition of our best systematic work on Obsteterics. It is so full of accurate information, and so clear of speculation and controversy, that it has deservedly been regarded as worthy of a place at the head of the long catalogue of works upon the subject that have been issued from the American press. Our readers, however, are so familiar with it that it is not worth our while to speak of it more at length.

It is got up in the good style in which the publishers are generally careful to clothe their publications.

ARTICLE III.

A Practical Treatise on the Diseases and Injuries of the Urinary Bladder, the Prostrate Gland and the Urethra. By S. D. Gross, M. D., Prof. of Surgery in the University of Louisville ; Member of the American Medical Association; Author of Elements of Pathological Anatomy, etc., etc., with one hundred and six illustrations. pp. 726 octavo. Blanchard & Lee, Philadelphia, 1851. (From the Publishers; for sale by S. C. Griggs & Co., Chicago.)

This work, for which there was a clear and pressing demand on the part of our Medical Literature, will be greeted by practitioners of Medicine and Surgery with no ordinary welcome, giving as it appears to do copious and clear delineations of the diseases which it discusses and their treatment.

We have not been able yet to give it a perusal, but from the high reputation of the author and the apparent marks of care in its production, we feel no hesitation in advising our readers to procure and study it. For want of time and space we shall be under the necessity of laying it aside for a more extended notice hereafter.

It is got up in the best style of the celebrated publishing house from which it is issued.

ARTICLE IV.

The Laws of Health in relation to Mind and Body: A series of Letters from an old practitioner to the patient. By LEINEL JOHN BEALE, M. R. C. S. pp. 256 duodecimo. Philadelphia: Blanchard & Lee, 1851. (From the Publishers, through S. C. Griggs & Co.)

This work treats of a subject which is of the utmost importance to mankind at large and is not designed exclusively for the Professional reader. However, as the Physician should always be posted up on the subject of Hygiene, that he may be able to give good and wholesome instruction to his patients and friends, it will be found worthy of a place in every Medical library. Physicians are too negligent of this subject generally. Few of them conceive it to be their duty to teach people how to prevent disease, being wholly satisfied with efforts to remedy their maladies after they have brought them upon themselves.

It is plain, however, that the old saying, that prevention is better than cure, is founded upon the true philosophy, and therefore the highest mission of the minister of health is to prevent sickness, pain, disease, and death by guarding against those violations of the laws of nature upon which they generally depend.

People are too apt to attribute to the dispensations of Divine Providence the ills that afflict them, especially sickness and unhealthy and shattered constitutions, when a little knowledge of the laws of health will generally show that their own imprudence has been the cause of such difficulties.

There are two reasons why this error prevails to so great an extent. The first is, thatth e people regarding their sickness

as Providential and look no further for its source. The second is, that Physicians do not inculcate among them the doctrines of the laws of health and a knowledge of the necessity of obeying them, perhaps because there is no good pretext whereon to attach a fee, and Doctors can as illy afford to work for nothing as any other class of community.

However, it will cost our friends but little effort to advise people to buy the book before us, urging as a most potential argument—one which will in many instances, at least, be convincing, that by studying it, they may save many Doctor's bills.

ARTICLE V.

Letters to a candid inquirer, on Animal Magnetism. By William Gregory, M. D., F. R. S. E., Professor of Chemistry in the University of Edinburgh. pp. 384, duodecimo. Philadelphia, Blanchard & Lee, 1851. (From the Publishers, through S. C. Griggs & Co.)

From a hasty glance at this work we infer that it is a defence of the so called Science of Animal Magnetism; but as the book has but just come to hand we are unable for want of time at present to give its contents an analysis.

There is so much claimed for Animal Magnetism, by its advocates, that makes too strong a demand on our credulity, that many of us are inclined to reject the whole affair altogether. And yet there are some manifestations that would seem to show that there is an influence exerted by its manifestations upon certain subjects, that is worthy of serious investigation. The most satisfactory explanation of these, that

we have seen, refers the physical phenomena manifested to the influence of the mind ; which seems to be corroborated by the fact, that the susceptible subjects are imaginative, speculative and nervous people.

To those who are curious on the subject, the work before us offers the attractions of a distinguished author, and a systematic arrangement of the topics discussed.

Part 3.—Selections.

ARTICEL I.

Remarks on Digestion, suggested by the case of Carcinoma of the Stomach, reported in the August No. of this Journal. By N. P. LATTIMORE, M. D.

In reading the interesting Report of Dr. P. H. Strong on "Carcinoma of the Stomach," published in the August number of your valuable Journal, I was struck with the first quere with which the doctor closes his communication. He says, "where was digestion carried on? Was it by the mucous coat, &c., or did the duodenum assume the function?

Taking the experiments of Mr. Bernard as a basis, the duodenum did not "*assume*" the function, for, according to him, digestion is *always* performed in the duodenum.

This doctrine is certainly not in accordance with the generally received notions upon this important question of physiology, yet, it is in direct accordance with experiment, and with observation, the two great bases upon which every truth must rest. M. Bernard, the pupil of the distinguished Magendie, although yet a young man, has enriched philosophy with many facts which do much to clear up some of the hitherto obscure points of this department of medical science. Made a member of the "Legion d' Honneur" for his discovery of the formation of sugar in the liver,—receiving the sanction of Magendie, Berard, and other eminent physiologists, his doctrines have become a part and parcel of our science; they only remain unknown on this side the Atlantic, because their author has not yet published them.

Where is digestion formed? Before answering this question, let us first determine what principles are the subject of this process. These may be reduced to three, viz: fibrine, sugar, and fat. These three matters are digested by means of certain secretions, viz., the saliva, the gastric juice, the bile, the pancreatic juice, and the intestinal secretion.

The office of the saliva seems to be to moisten the food during its mastication and swallowing, for we find it secreted in

a direct ratio with the dryness of the masticated food. But upon this point we need spend no time.

After deglutition, the food enters the stomach, and is there subjected to the action of the gastric juice, which, like the saliva, is not secreted during abstinence. The gastric juice consists of

Water,	(parts)		98
Uncombined acid,	"	}	
Mucus,	"	}	
Phosphate of lime,	"	}	2
Pepsin,	"	}	100

The free acid is the lactic, and this, with the pepsin, are the active principles of the secretion.

Pepsin is an azotized substance, soluble in warm water, and if a few drops of acid are added to the solution, it will present all the properties of the gastric juice. This substance acts best at a temperature of 140°—that of the body during digestion.

Of the three alimentary principles, (fibrin, sugar, and fat,) the first, or fibrin, is the only one acted upon by the gastric juice, the other two passing into the duodenum unchanged.

In what manner does the gastric juice act upon the fibrin? Place a piece of meat in this secretion, and the first change observable is an increase of size, accompanied by a transparency of the edges. This change takes place as readily in acidulated water, as in the gastric juice, and is merely the physical effect of imbibition. But after a certain time (depending on the size of the ingested matters and the agitation to which they are exposed) the fibrin softens, and finally is wholly dissolved. Such is the action of the gastric juice upon all azotized ingesta; the non-azotized alimentary matters, as before remarked, are not affected by the secretion.

The result of this action is a fluid called chyme, and for a long time it was supposed that, in the production of this fluid, some chemical action between the gastric juice and the food was necessary. This opinion is now known to be erroneous, for if a portion of chyme resulting from the action of the gastric juice upon fibrin, be placed under the microscope, the existence of perfectly formed muscular fibres is evident; showing that the meat has been only disintegrated and not dissolved. No chemical change has as yet taken place, and the

chyme is as really unfit for assimilation as was the fibrin itself.

After leaving the stomach, the chyme enters the duodenum, when it is subjected to the action of the bile, pancreatic juice, and intestinal secretion, and here it is that the most important part of the digestive process is accomplished. In man, the bile and pancreatic juice enters the duodenum by a common duct, and are thus mingled before their arrival in the small intestines. This is not true, however, in some of the lower animals, the rabbit, for example. In every case where these secretions are conveyed to the duodenum by separate ducts, the bile is first discharged. Thus in the rabbit, the hepatic duct enters the duodenum just below the pyloric orifice of the stomach, while the pancreatic duct comes in fifteen inches lower down. The most natural course, then, seems to be to consider, in the first place, the action of the bile upon the chyme, which it will be remembered consists of disintegrated fibrin, of fat, and of sugar; it is simply a solution of the ingesta in the gastric juice, and not a fluid *sui generis*.

Now the moment the chyme comes in contact with the bile, a precipitate is formed upon the intestinal villi, consisting of gelatin, albumen and casein, which have been dissolved in the gastric juice, united with the chloric acid of the bile. Then, *and not till then*, will these matters resist decomposition. Expose a portion of chyme to the action of the atmosphere, and in a few hours putrefaction will take place. If, however, a certain quantity of bile be mixed with the chyme, putrefaction is no longer possible. If yeast and sugar be mixed, fermentation immediately ensues, but it ceases the moment bile be added. The great office of the bile seems to be to prevent the decomposition of the alimentary matters which would necessarily take place without its presence. The chemical action which takes place during these changes, is not yet known. A simple experiment will show the influence of the bile in preventing fermentation; mix emulsina and amygdaline (both principles of the bitter almonds) and a decomposition results which produces prussic acid. If the two principles be thrown into the stomach together, the change takes place, and, if in sufficiently large quantities, death results. The same occurs if the amygdaline be administered by the mouth and the emulsine by the rectum; but reverse the pro-

cess, give the emulsine by the mouth and the amygdaline by the rectum, and no prussic acid will be formed, because the bile coming in contact with the emulsine, removes its power of fermentation. Such, then, is the office of the bile.

The pancreatic juice, like the saliva and the gastric juice, is secreted only during digestion. In its action it cannot well be considered separately from the bile, because it always acts in conjunction with it, unless removed from the body. However, when so removed, it is found to dissolve fatty bodies as well as the azotized matters which have been precipitated by the bile, and also to convert the starch group of alimentary matters into sugar. Fat, during the digestive process, undergoes no chemical change, for we find it in the thoracic duct possessed of all the properties of fat; fat and lymph being the only constituents of chyle. How is fat capable of absorption? The gastric juice does not act upon it, nor does the bile, excepting to prevent its putrefaction. The only change it undergoes is a lessening of its globules, which are too large to be admitted into the lacteals. This diminuition of its globules is accomplished by the pancreatic juice. Obstruct in any way the pancreatic duct, and the fat, incapable of absorption, is carried off with the excrement, producing that form of diarrhea known as "adipose"—which is always present in cancer of the pancreas. Such, then, is the office of the pancreatic juice.

En resume, then, we see that the stomach only serves to prepare the alimentary matters for digestion; it does not act at all on fatty matters; it only soaks, or swells bodies of a starch group; its greatest action is on albuminous matters, and these it only partially dissolves, for in the solution of meat in the gastric juice the microscope still shows us muscular fibres.

The bile precipitates the solution just mentioned, and renders the whole incapable of putrefaction.

The pancreatic juice dissolves the precipitates formed by the bile; emulsions the fatty bodies; and changes bodies of the starch group into sugar.

But little is known of the action of the intestinal secretion, or of the secretion of the glands of Brunner. They are contained in the mucus membrane of the duodenum, and are of a more complex structure than any other glands in the vi-

cinity. Brunner regarded them as accessory to the pancreas. Their influence upon digestion, however, is not fully known.

According to M. Bernard, then, the stomach acts upon alimentary matters only so as to prepare them for digestion, and it acts upon all bodies very nearly in the same way; while, for him, the duodenum is the grand center of the digestive process.

The case reported by Dr. Strong, comes to the support of this theory in more ways than one. Here digestion evidently could not have been performed in the stomach, and if that process was ordinarily accomplished here, the function would have been impaired, and thus attention long before have been directed to this organ.

Again, the limited capacity of the stomach satisfactorily accounts for the patient's craving only "the most concentrated diet."

The slight derangement of digestion might be premised when it was once known that neither the pylorus, nor the duodenum, nor the pancreas were involved in the disease;—the autopsy showing that the cancerous degeneration was almost wholly confined to the body of the stomach, none of the remaining viscera being involved excepting the colon, and that only slightly.

Trusting that I have satisfactorily replied to the quere, allow me to say, in conclusion, one word upon M. Bernard's views as to the ultimate disposition of the alimentary matters, or rather as to absorption. According to him, one only of the three principles, viz., fat, is taken up by the lacteals, and this it is which gives to chyle its white color. During abstinence the lacteals and the thoracic duct contain only lymph.

The other two principles, viz., fibrin and sugar, are absorbed by the veins, and their digestion completed in the liver. As they exist in the duodenum they are wholly unfit for assimilation, and it is only after passing through the liver that they are fitted for use by the economy.

M. Bernard's discoveries regarding the functions of the liver, perhaps constitute the most important contributions which have been made to physiology for the last half century, and an exposition of his views on this subject might interest many of your readers.—*Buffalo Med. Jour.*

ARTICLE II.

Diameters of the Fœtal Head, from measurements made in the Dublin Lying-in Hospital. By ADDINELL HEWSON, M. D., of Philadelphia. Communicated in a letter to Dr. MEIGS.

DEAR SIR:—Knowing the greatest interest which you always take in everything connected with medical science, and particularly with the branch of Obstetrics, I have availed myself of a short relaxation from my hospital duties, to draw up for you the results of some measurements of fœtal crania, which I made last spring whilst an interne of the Dublin Lying-in Hospital. It affords me particular pleasure to communicate the results of these observations to you, as it was from the perusal of your recent work on Obstetrics that I was induced to make them.

On comparing the estimates of the diameter of the fœtal head which you had given, with those contained in foreign works on Obstetrics, a great difference will be observed. Your diameters are far greater than those given by any foreign author. The question therefore presented itself to my mind, is the estimate given by those abroad too low, or is there really an ethnological difference? The accuracy and extent of your own observations precluded all thought of your estimates not being correct, and I therefore availed myself of the occasion which presented, to ascertain, as well as I could, wherein consisted the difference.

For this purpose I extended my observations to one hundred and sixty-six children, born in the hospital, between the 10th of March and the 13th of April last. I did not select cases, but made my measurements promiscuously, independent of age or sex, of every child born alive, and at full term, in the Institution, between those dates.

I employed in making these measurements, a pair of delicate turner's calipers, admitting of accurate adjustment, and an ivory scale marked to the twentieth and fiftieth of an inch. Each measurement was made with the greatest care, within twenty-four hours after the birth of the child, and registered at the time.

The sum of my measurements of the biparietal diameter, was six hundred and three inches and eighty-eight hundredths, which gives a mean of three inches and six-tenths, for that diameter. The sum of the occipito-frontal diameters was seven hundred and seventy-seven inches, and seventy-seven hundredths; the mean, four inches and sixty-eight hundreths. The sum of the occipito-mental diameters was eight hundred and eighty-seven inches and eighty-three hundredths; the mean, five inches and twenty-eight hundredths.

That you may consider these averages very just, I will mention the fact that there was not a very great range between the measurements. Thus for instance, in 196 biparietal diameters, but one exceeded four inches, (the mean being 3 6-10th inches.) You mention having met with sixty-eight exceeding that number in a series of one hundred and fifty measurements, the mean of which was three inches and eleven twelfths. The occipito-frontal diameter was five inches in six, out of my hundred and sixty-six, and in fifteen it exceeded that—the greatest being five and two-tenths. The occipito-mental attained six inches in three cases out of the hundred and sixty-six, in one other it reached six inches and one-tenth.

Having thus detailed to you the results of my measurements, permit me to draw your attention to the manner in which they will compare with the estimates given in standard foreign works. The following table contains the estimates given by some of the best English and French authorities. I have reduced the fractions in their figures to decimals, as my own are given in that scale. To the end of the table I have added my own estimates, that you may see at a glance how they compare :

	Bi-parietal,	*Occipito-frontal.*	*Occipito-mental.*
Baudeloque,	3.34 to 3.50	4.50	5.50
Velpeau,	3.50	4 about	5
Cazeaux,	3.50 to 3.75	4.25 to 4.50	5.25
Burton,	3.50	4.30	5.60
Ashwell,	3.50	4 50	5.25
Murphy,	3.50	4.50	5
Churchill,	3.50 to 4	4 to 4.50	5
My own,	3.60	4.68	6.25

You can readily see that, although mine are the highest,

there is not a great difference among them all, but, that this difference is greater when you compare my estimate with those of Baudeloque and Velpeau. M. Cazeaux has not, in reality, given a mean, but has only given the points between which it may be found, and I might with propriety have omitted his measurements altogether, had I not wished to give you an opportunity of comparing mine with those of the most recent of French authorites. I have also very much to regret that Dr. Churchill has done the same, for he is the best of authorities in Ireland, and his well known accuracy of observation would, I believe, by its weight, have confirmed my results.

Now let me compare my results with those of your own observations in this country, and that such a comparison may be a perfectly just one, I will take the mean of a series of my measurements, equal in number to that of which you have given the mean.

You give the mean of a hundred and fifty measurements for the biparietal diameter, as three inches and eleven-twelfths, or 3 inches 88-100ths. The mean of the first hundred and fifty of my measurements, is 3 inches 63-100ths, the difference is 25-100ths, or precisely a quarter of an inch. Your mean for the occipito-frontal diameter, from the same number of measurements, is four inches and ten lines, or four inches 83-100ths. My mean is 4 inches and 68-100ths; the difference is 15-100ths, or about 1-7th of an inch.

You give the mean occipito-mental diameter, from 126 measurements, as five inches and five-tenths. The mean of the first 126 of my measurements of that diameter, is five inches and 36 hundredths; the difference, 14-100ths, of an inch, nearly the same as for the occipito-frontal diameter.

Thus you see that there is a very essential difference between our results, a difference too great to be attributable to inaccuracy on my part alone. I am conscious of having taken the greatest care in all my observations, and although my estimates are higher than those to be found in any foreign work, still they lead to the conclusion that there really is some other cause than inaccuracy to account for the difference; and may we not seek for it in an ethnological difference in the cranial developement of the fœtus? This is certainly a question

of interest, but it is not one which a single series of observations like my own can solve.

With much respect, I remain,
Yours sincerely,
ADDINELL HEWSON.

Pennsylvania Hospital, Sept. 13th, 1851.
—*Medical Examiner*.

ARTICLE III.

Case of Hermaphroditism. Dr. JNO. NEILL communicated to the College of Physicians the following curious example of Hermaphroditism, in a black brought to the anatomical rooms of the University of Pennsylvania.

She dressed as a female, and was apparently twenty-five or thirty years of age, judging by her teeth and general appearance. Very little information could be obtained concerning her habits and propensities. She resided among the degraded blacks in the lower portion of the city, and died from drunkenness and exposure, according to the verdict of the coroner's jury.

From a superficial view of the pelvis and genitals, almost any one would have pronounced the subject to have been a *hypospadic male*, notwithstanding the large mammæ and the want of hair upon the face.

The breadth of the shoulders compared with the narrowness of the hips, and the form and development of the limbs would, alone considered, have indicated the male sex.

The representative penis was five inches in length, and one inch in diameter; and the skin, prepuce, glans, corona, fossa navicularis, and orifice of the urethra presented an appearance like that of a penis. But, by lifting up or turning aside the penis, it was found that the fossa navicularis was split, and that the urethra was wanting. In the place of the urethra

there was a groove reaching from the glans penis to an oblique opening in the perineum. The cuticle lining the groove was thin and shining; it was also deficient in pigmentary cells. On each side of this groove there was a fold of skin commencing near the middle of the side of the penis, and stretching around the perineal orifice. The interior of this fold showed it to be the analogue of the nymphæ or corpus spongiosum.

The perineal opening was the commencement of a passage common to the bladder and vagina, and its diameter was equal to that of a common-sized catheter, although the orifice appeared much larger, owing to its obliquity.

The scrotum existed upon one side only. It was corrugated with transverse rugæ, and covered as usual with hairs and sebaceous follicles. To the touch it gave the idea that it contained two hard bodies.

Internal Organs.—These were completely female, though not perfectly developed. The dissection was commenced by opening the abdominal cavity, and the contents of the pelvis were examined in connection with the external parts.

The bladder was natural in position and size. There was no prostate, and the urethra was about one inch in length, and opened into the perineal passage.

The uterus was small, but symmetrical; to its sides were attached the broad ligaments, holding it in its proper relation to the rectum and bladder.

The Fallopian tube of the right side had no free and fimbriated extremity, be terminated in a sac which was adherent to the ovary.

The ovaries were small, spherical, and corrugated; a section exhibited the usual filbrous tissue and visicles.

The right round ligament of the uterus was exceedingly thick, and appeared to be muscular; but, upon examination with the microscope, it was found to be composed of white and fibrous tissue. It reached to the bottom of the scrotum, where it was firmly attached.

The *scrotum* contained an irreducible omental hernia, probably congenital. The hernial sac contained also a small hardened mass, which was supposed to be a representative testicle, but it contained no true glandular structure or excretory tube. The vagina was of the proper length, but extremely narrow, especially where it approached the perineal orifice.

The above case would be classified under the head of

"*spurious heamaphroditism*" in the female, according to Professor Simpson's article on this subject in the *Cyclopædia of Anatomy and Physiology.—Quarterly Summary of Translations.*

ARTICLE IV.

Extracts from the Records of the Boston Society for Medical Improvement. By Wm. W. Morland, M. D., Secretary.

May 12. *Hydrocephalus.*—Dr. Coale reported the case of A. H., born January 14th, 1849. Parents healthy; first child. Dr. C. was called to see her when she was two weeks old; found her laboring under cerebral symptoms, which soon resolved themselves into undeniable signs of water on the brain. She was treated with small doses of calomel, and afterwards with hydriodate of potassa, with apparent benefit at first. The head, however, steadily increased in size. The general health was good except when disturbed by teething—at which time she had occasional spasms, never amounting, however, to a general convulsion.

	Measurement of head.	Inches.		Inches.
Sept. 12th, 1849.	Over crown from meatus to meatus	12½	Round	18½
Nov. 1st,	" " " " " "	13½	"	19½
" 28th,	" " " " " "	14	"	20
May 10th, 1351.	" " " " " "	17¾	"	23½

The family having moved out of town in Aug. 1850, Dr. C. did not see the child after that except at rare periods. The last time was May 10th, 1851. Her height is now thirty-one inches; she lies on her back; is blind, but hears, though imperfectly. The pressure above has forced down the vault of the orbit so that the eyeball seems lower, and more covered by the lower than the upper lid; much of the white above the cornea being exposed, whilst the cornea is half covered by the lower lid. The mouth contains the usual number of teeth. Motion of limbs perfect, but feeble, except of right arm, which is paralyzed almost entirely. Fond

of throwing the left hand about, and with it occasionally feels the right arm, and resists any attempts to meddle with it. Extremities cold, making it necessary to keep a good fire in the room day and night through the winter. Never cries or frets. Takes, three times a day, ten ounces of milk, sucked from a bottle. Bowels open with regularity once a day.

The child died two months and a half after this, without any remarkable change.

May 26. *Otorrhæa of Twenty Years' Duration, terminating fatally from Hemorrage.* Case furnished by Dr. F. H. GRAY. Dr. PARKMEAN showed the specimen.—F. C., twenty-one years of age, of scrofulous habit, though having a good share of health, had been troubled with a purulent discharge of fetid character from the right ear, from infancy.

On the evening of April 10th, 1851, patient rode several miles on horseback, and on the following morning complained of general uneasiness, though sufficiently able to attend to his ordinary business. On the morning of the 15th, severe pain commenced in right ear, which continued for three successive days, at the end of which period, copious and offensive purulent discharges found their way into the meatus auditorius and likewise into the mouth. Patient was greatly relieved by the discharges, and was able to walk and ride out, though he still suffered from headache, until the morning of the 21st, when some coagulated blood was ejected from the mouth. Copious hemorrhage took place from the ear into the mouth at inervals, varying in quantity from ʒiv to Oj, during the next twenty hours, when he quietly laid himself back, and expired. During the whole illness, there was an almost daily occurrence of vomiting, with the pulse unusually slow, possibly to be referred to the influence of narcotics.

At the autopsy, there was found a slight bloody effusion in the lower surface of the cerebellum, proceeding from a small gangrenous opening in the posterior surface of the right lateral sinus, just before it terminates in the jugular vein ; the sinus was also ulcerated on the side next the petrous portion of the temporal bone, and blood was extensively effused into the cavity of the ear and into the cellular tissue behind the pharynx. The petrous portion of the temporal bone, sawn through and exhibited, showed the cavity of the ear deeply affected with caries, and undoubtedly the inflammation had spread from this point, involving the sinus. The specimen is in the Society's Cabinet.—*Amer. Jour. Med. Sci.*

ARTICLE V.

An Ovary removed by mistake for a Libial Cyst.

At one of the late meetings of the Surgical Society of Paris, M GUERSANT, Chief Surgeon to the Hospital for Children, brought forward a case in which an error in diagnosis was committed, and which ended fatally. The patient was a little girl, eleven years of age, who, ever since she was one year old, had in the left labium a small painless tumor. Of late, however, this tumor had become troublesome, and interfered with walking. When examined, it was found of the size of a small walnut, situated in the thickness of the labium, and extremely movable, so much so, that it could be pushed downwards to the most posterior portion of the labium, and upwards as far as the external ring. It was, however, impossible to press the tumour into the ring, which latter presented no abnormal dilatation. The tumour had a great deal of analogy with a testicle. M. Guersant looked upon it as a cyst, and resolved to remove it. A longitudinal incision brought into view a membrane much resembling tunica vaginalis, and having the aspect of the peritoneum. Through this membrane an ovid body was observed, which was no other than the overy; it was attached to a pedicle formed by the Fallopian tube, which ran into the abdomen through the inguinal canal. M. Guersant placed a ligature on the pedicle, and cut out the ovary. Acute peritonitis occurred the very next day, and the patient died on the third day after the operation. M. Morel mentioned during the discussion that he had had an opportunity of seeing a tumour of the same kind in the labium, and formed by the ovary; no modification of size or sensibility was noticed to occur at the menstrual period. M. Lenoir stated that Pott has related a case in which the two ovaries were removed by an error in circumstances analogous to those of M. Guersant's patient.—*Prov. Med. and Surg. Jour., Aug. 6th*, 1851, *in Amer. Jour.*

Part 4.—Editorial.

ARTICLE I.

PROF. DAVIS' INTRODUCTORY LECTURE AT THE OPENING OF RUSH MEDICAL COLLEGE.

Prof. DAVIS' Lecture Introductory, to the regular course of Instruction in the Rush Medical College, on the 3d inst., was an able, clear and unanswerable argument in favor of increasing the facilities for students to acquire a sound and thorough Medical education, as the chief means of elevating the dignity and usefulness of the Medical Profession.

He proved, first, from reliable authority, history and reports of medical travellers, that the number of those professing and practicing the art of healing, is as great, and generally greater, in those countries where the Profession is degraded by the lowest degree of ignorance.

Secondly, that the intelligence and usefulness of the Profession in all countries, bears an intimate relation to the means afforded in those countries for acquiring a knowledge of the science and art of Medicine. That, although the relative number of practitioners to the population in this country has not increased with the rapid multiplication of Medical schools, the number of those who prepare themselves by attending upon the means of instruction before entering upon the practice, has been greatly augmented.

Thirdly, that Hospital instruction is an essential and indispensible part of the education necessary to make good and competent practitioners. To prove this position, he quoted the repeated resolves of the American Medical Association,

which most emphatically insist upon it, and declare that, "College Clinics" are not recognized as substitutes for Hospital Clinical Instruction. Upon this subject, we cannot refrain from quoting the language of the author. It is so full of truthful illustration and sound reason, that we are sure it will carry conviction to every candid reader, as it did to the large and attentive audience that heard it:

"Notwithstanding these direct and oft repeated recommendations of the Association, less than one half of the whole number of Medical Colleges in this country, are so located as to afford the students in attendance on them, any opportunity for witnessing Hospital or bed-side instruction. And more than one third of the entire number of students, who annually resort to Colleges for instruction, resort to those only, where no Hospitals either do or can exist.

But, why are these things so? Why are a greater number of students annually educated in the schools at Castleton, Woodstock and Pittsfield, than in the time-honored one at Boston, with its free access to one of the best Hospitals in the country? Or, why do we find less than 200 annually visiting the ample Commercial Hospital of Cincinnati, while more than 300 congregate in the schools at Cleveland and Columbus in the same State? It is not because Medical students are indifferent as to the extent and quality of the instruction which they shall receive; neither is it because they attach no importance to demonstrative or true clinical instruction. But the true reason is found in circumstances of an entirely different character. The necessary cash expenditures for Lecture fees, boarding, &c., during a single College term in Boston or Cincinnati, for example, are very nearly twice as much as are required in either of the smaller places named. Hence, all those students who are unable to pay from $84, to $105, for Lecture fees, in addition to the increased price of board in our large cities, where alone Hospitals, worthy of the name, can be supported, must be content to forego College instruction altogether, or resort to those schools located in country villages, where lower Lecture fees and cheaper board, bring the expenditures within their means. It is thus seen that pecuniary considerations alone, deprive one third of all the Medical students in this country, of the most valuable part of Medical instruction.

In making this assertion, and the preceeding comparisons, I make no reference to the relative ability or learning of the individual professors engaged in one school or another, but I refer solely to the necessary means and facilities which their respective locations enable them to furnish the student in his search after a thorough knowledge of his profession.

The rapid multiplication of Medical schools during the last 20 years, and especially the increase of those located remote from large cities and great Hospitals, has been witnessed with regret by many of the profession; and to the active rivalry existing among them, has been attributed the present low standard of Medical education among us. Here, however, as is too often the case, a partial comprehension of facts has caused mere effects to be mistaken for causes. If any one of the schools to which we just alluded were stricken from existence to-day, leaving the expense necessarily incurred in attending those that would be left, the same as heretofore, it would in no degree either elevate the standard of Medical education or extend the usefulness of the profession. On the contrary, it would produce directly the reverse effect on both, by placing the schools and the profession in the same relative position as they were in this country during the first quarter of the present century. Those students whose pecuniary resources would enable them to expend from $200, to $250, for each course, would continue as heretofore, to avail themselves of College instruction, while a very large proportion would be wholly unable to do so, and would consequently gain what knowledge they could from their preceptors and their text-books and enter directly on the duties of practice without ever seeing a College or a Hospital.

Instead of lessening the whole number of Medical students, as many seem to suppose, it would simply lessen the relative proportion of those resorting to Medical schools for instruction, and thereby greatly increase ignorance, in our ranks, with all its degrading consequences.

The truth is, that those Medical schools located remote from Hospitals and presenting a lower rate of Lecture fees, had their origin in, and have thus far received their support from the actual necessities of the profession; and they can be dispensed with only by obviating the necessities that gave them birth. Hence, if we would arrest the further increase of such schools as possess no adequate means for demonstrative and clinical instruction—if we would increase the relative number of those students who avail themselves of all the facilities necessary for the acquisition of

a thorough Medical education—in a word, if we would increase the learning and skill of the whole profession, and thereby add greatly to its honor and usefulness, we must bring the *terms* of attendance on such schools as have access to Hospitals and every other useful appliance for communicating Medical knowledge, pecuniarily within the reach of every intelligent and upright student of Medicine. By this means, and by this alone, can the judicious recommendations of the American Medical Association, in reference to elevating the standard of requirement, extending the College term, and insisting on demonstrative and Hospital instruction, be complied with, either by Colleges or students. To clear away the obstructions that have so long barricaded the high-ways to science—to promote universal education—to elevate man intellectually and universally, is a part of the spirit of the age in which we live. And I am happy to behold around me, on my right and on my left, those who have drunk in freely and deeply of this spirit. Holding as they do, the keys of this institution, located in the great commercial metropolis of the North-West, and having unrestrained access to the only Hospital furnishing adequate means for Clinical instruction in the whole vast region north of the Ohio and west of Buffalo, they have not hesitated to open these halls to the upright and earnest inquirers after Medical knowledge, on terms *pecuniarily*, as low as the means at their command would permit. But let me presume for a moment, that they had not acted thus. Suppose they had holden fast to the ancient custom of demanding from $75 to $105 for Lecture fees, for every student who might desire admission here. What would have been the result ? A favored few, to use the language of Dr. Beck, would doubtless have been found occupying these seats on the present occasion. But I speak advisedly when I say that a vast majority of those now before me would either be at their homes, where they would remain a year or two pouring over a few musty volumes, catching here and there an item of practice with their preceptors, and then launching forth as fully educated practitioners of the healing art, or they would give origin and support to half a dozen Medical Colleges located in the country, in the absence of Hospitals, where the cheapness of board, and the policy of giving *credit* for Lecture fees, would make them accessible to the great mass of students. With such a pecuniary barrier at the door, of what benefit would our Hospital be to the profession of the North-West, though it might contain a thousand patients ? And of what avail would be all

our means for giving instruction in General, Microscopic, and Descriptive Anatomy, Physiology and Pathology, as well as every other branch of Medical science ? And yet, for obeying the indications pointed out by the whole past history of our profession, by endeavoring to place every important and essential means for the most thorough and practical education of the student of medicine, *pecuniarily* within the reach of every earnest seeker after medical knowledge, we have been accused of lowering the *dignity* of the Profession and of *cheapening* the Medical Diploma. But do our accusers really mean that the *dignity* of our time-honored and noble profession depends on the amount of the fees which our Colleges assess as the tariff on medical knowledge, or that the *cost* of a Diploma is nothing more than the few dollars paid on the reception of the parchment ? If so, precarious indeed, is all our dignity, and cheap are our boasted honors. According to this doctrine, we have only to hedge up the avenues to medical knowledge, cause the Colleges to double and treble their present rate of charging, so as to wholly exclude from their portals the great mass of young men seeking to qualify themselves for practitioners of the healing art, and we shall be the most *dignified* Profession on earth. The charge is too absurd to merit even a passing notice. When the Rush Medical College shall dispense with any of the necessary means for giving sound Medical instruction; when she shall lower, in any degree, the standard of requirements in relation to the mental attainments of those seeking her honors, let the Profession *protest* against her action ; and him who addresses you will be the first to endorse the paper. But so long as her only crime consists in rendering all the means for a thorough, demonstrative, and practical education more accessible to the profession of the North-West, I shall glory in such crime. And not only so, but I look forward with confidence to the day not far distant, when she will not only present, as she now does, all the means and appliances for the most extended and practical education, but her Lecture term shall be extended to the full period of six months, or even more. and the small pecuniary barrier now remaining, shall be still farther removed. Increase to the utmost limit every facility for acquiring Medical knowledge on the one hand, and steadfastly elevate the standard of requirements on the other, is the motto inscribed on our banner. In the matter of education, whether Medical or otherwise, I would place the active, industrious and aspiring intellect of the son of poverty on exactly the same level with the heir of fortune. The *price* of

Medical honors to both, should be drawn, not from their pockets, but from their mental toil and the ample stores of Medical knowledge which nought but their own intellectual labor could accumulate. So noble and extended a science, and so benevolent an art as Medicine never has known and never can know such a thing as a moneyed aristocracy among its votaries."

ARTICLE II.

THE JOURNAL.

We are exceedingly sorry that we did not print enough of the first number of this volume to supply all our new subscribers. Many of them who have not received the Journal until now will understand the reason of our requiring them to begin in the middle of the volume, to be a want of back numbers.

The Intelligencer is issued regularly every other month and sent to subscribers who have paid up all arrearages at the the time of sending out each number.

The rule in reference to the Intelligencer cannot be varied from as it would lead to much trouble and defeat one of the objects of its publication. We wish all of our subscribers would avail themselves of the opportunity to get two Medical papers instead of one, without any additional charge.

We shall be obliged, soon, to make advance payment the only condition on which we send the Journal to subscribers.

ARTICLE III.

MISCELLANEOUS MEDICAL INTELLIGENCE.

We hear that there are over two hundred Medical Students in attendance at the University of Michigan at Ann Arbor.

The class in Rush Medical College, at the opening of the present Session is larger than ever before. The prospect is good for a very full class, as students are coming in rapidly. A large portion of those in attendance have already taken the Hospital ticket.

There is shortly to appear a new work on Surgical Anatomy and Operative Surgery, by M. M. Bernard and Huette of Paris, with 150 original steel plates.

During the year that preceded the taking of the census, the deaths in Vermont were one to every ninety persons; in Rhode Island one to every sixty-six; in South Carolina one to every forty-eight; and in Arkansas one to every fifty-four.

A new State Hospital for the Insane is about to be erected n Massachusetts. The Hospital provisions for the Insane in that State already exceed by nearly one half those of any other State in the Union.

The Army board of Medical examiners for Surgeons in the service of the United States, will be in session in the city of New York on the 20th instant.

Paul F. Eve, the former able editor of the Southern Medical and Surgical Journal, and late Prof. of Surgery in the Medical College of Georgia and the University of Louisville, has accepted the chair of Surgery in the University of Nashville, Tenn., and become associate editor of the Nashville Medical Journal.

A new Dental College is about to open in Syracuse, New York.

Dr. Farnham, convicted of conspiracy against the Michigan Central Railroad, and sentenced to the Penitentiary is not a physician. His title arises from the fact that he has been practicing dentistry. The man whom the papers style Dr. Fitch, implicated in the same crime was a farmer and never either laid any claim to, or received the title of Doctor, until after the trial commenced. The only physician indicted was found innocent and set at liberty.

We hear from various parts of the country that Dysentry has prevailed very extensively during the past summer and early part of autumn, as it did the year preceding. It has been quite a common type of disease for three successive years in Chicago, though not marked by any considerable mortality.

The following we extract from a letter from W. H. Martin, M. D., of Rushville, Ind.—

"We have had a great deal of Dysentery to contend with this season. Many cases were of a severe character, and strange as it may seem, we have lost but one case. We depended chiefly on Opium, and injections of Sol. Starch, Acet. Plumbi and Thebecaic tinct., assisted by hot straps, made by wringing flannel out of very hot water and then moistening the surface with Turpentine. Many of our cases were ushered in by very severe vomiting. We found nothing so prompt in arresting this condition of the stomach as small doses of the Proto Chlor. Mercury, say ½ grain, exhibited dry and washed down with a mouthful of Elm water, every 20 or 30 minutes, according to the severity of the vomiting and until it ceased. I do not now recollect a case that resisted this treatment; and I know of but one or two that were in the least ptyalized."

Dr. Charles W. Wright of Cincinnati, Ohio, says, boiling a little Slippery Elm bark, (*Cort. Ulmus Fulva,*) in oils and fats completely prevents their becoming rancid. It gives to fresh butter the flavor of the kernel of the Hickory nut.

Dr. James B. Coleman reports a case of re-production of the Mammay gland after excision, in the New Jersey Medical Reporter.

Dr. Hachenberg of Springfield, Ohio, reports a case in the Western Lancet, in which the application of touruiquets to all the extremities near the body speedily arrested a violent hemoptysis.

OBITUARY.

Died, on the 16th of Oct., Nichols Hard, M. D., Prof. of Anatomy in the University of Iowa. Prof. Hard maintained a good character as a pleasing and instructive lecturer during his connection with the Medical schools at Laporte, Ind., and Keokuk, Iowa, and enjoyed a high reputation as a practitioner in Aurora, Ills., the place of his residence. He has been cut down in the prime of life and in the midst of his usefulness.

—On the 30th of Oct., at Oswego, Ills., of Typhoid Fever, Dr. Isaac Ives.

—At Carlinville, Ills., on the 16th of Sept., of Cholera, Dr. Edward Wright.

—Dr. Wright graduated at the last commencement of Rush Medical College. He was a young man of excellent character and gave unusual promise of attaining to eminence in his profession.

ARTICLE IV.

NOTICE TO READERS AND CORRESPONDENTS.

We have received original communications from Drs. W. Matthews and J. E. McGirr.

We have received from Messrs. Blanchard & Lea of Philadelphia, through S. C. Griggs & Co., Booksellers of Chicago, the following books for notice, which shall receive attention as early as possible: A new edition of Churchill's Midwifery; Gross on the Diseases and Injuries of the Urinary Bladder, Prostrate Gland, and the Urethra; Letters to a candid Inquirer on Animal Magnetism by Prof. W. Gregory; Beale on the Laws of Health; Walshe on the Heart and the Lungs and Bird on Urinary Deposit. We have also received the Southern Medical Reports (in exchange). The Transactions of the Medical Society of the State of Pennsylvania. The Proceedings of the Illinois State Medical Society. A Circular pamphlet to the Medical Profession by Dr. H. A. Ramsay of Raysville, Ga. The New Orleans Monthly Medical Register, No. 1., Vol. 1., for October. An extra of the Western Journal of Medicine and Surgery, being a crontroversial reply to Prof. Bullitt. The proceedings of the Iowa State Medical and Chirurgical Society, at its second annual meeting in May last. A small paper called the Belmont Farmer, asking how we will exchange, to which we reply for $2 per annum in advance. We have also received our usual list of exchanges.